ओ३म्

नमो निर्भ्रमाय जगदीश्वराय।

COMPILED

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अनुभ्रमोच्छेदन॥

श्रीमत्स्वामिदयानन्द सरस्वतीजी के

शिष्य भीमसेन शर्म्मा ने

राजा शिवप्रसादजी के द्वितीय निवेदन के उत्तर में

बनाया॥

अजमेर नगरस्थ

वैदिकयन्त्रालय में छापकर प्रकाशित किया.

संवत् १९७३.

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पञ्चमबार

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अनुभ्रमोच्छेदन ॥

यस्या नरो भ्रंश्यति वेदवाक्यास्तया हि युक्तं जनसेनया यत् ।
तन्नाम यस्यास्ति महोत्सवं स त्वनुभ्रमोच्छेदनमातनोति ॥ १ ॥

भूमिका ।

मैंने विचारा था कि राजाजी और स्वामीजी ने एक २ बार लिखा है आगे इसका प्रपञ्च न बढ़ेगा परन्तु वैसा न हुआ और उनके अनुगामी लोगों ने समाचारपत्रों को भी गजाया और बहुत योग्यायोग्य वाच्यावाच्य भी लिखना न छोड़ा और मैंने यह जान भी लिया कि स्वामीजी अपने नाम से इसपर कुछ भी न लिखें और न छपवावेंगे क्योंकि इसपर श्रीयुत स्वामी विशुद्धानन्द सरस्वती और बालशास्त्रीजी की सम्मति नहीं लिखी तथा अन्य किसी आर्य्य ने भी इसके प्रत्युत्तर में न लिखा यह बात ठीक है कि स्वामीजी को तो इस पर लिखना योग्य ही नहीं क्योंकि वे अपनी पूर्व प्रतीक्षा से विरुद्ध क्यों करें जब ऐसा हुआ तब मैं यथामति इस पर लिखने में प्रवृत्त हुआ। यद्यपि इन महाशयों के सन्मुख मेरा लेख न्यूनास्पद है तथापि अन्तःकरण से पक्षपात छोड़कर देखने से कुछ इससे भी तत्त्व निकलेगा और जो कुछ इसमें भूल चूक रहेगी उसको सज्जन महात्मा लोग सुधार लेंगे अब जो राजा शिवप्रसादजी की यह प्रतिज्ञा है कि अब आगे इस विषय में कुछ न लिखा जायगा तो मुझ को भी आगे लिखना अवश्य न होगा जो राजाजी ने भ्रमोच्छेदन पर दूसरा भाग छपवाया है उसमें स्वामीजी के लेख पर निरर्थक आदि दोष दिये हैं उन और इन दोनों पुस्तकों के लेख को जब बुद्धिमान् लोग पक्षपात रहित होकर देखेंगे तब अवश्य निश्चय करलेंगे कि कौन सत्य और कौन असत्य है ॥

इति भूमिका ॥

देखिये राजाजी के प्रिय और सुन्दर लेख को निवेदन पहिला पृष्ठ १ पंक्ति ११ ऋग्वेदादिभाष्यभूमिका मंगा के पृष्ठ ६ से ८८ तक देखा । विचित्र लीला दिखाई दी आधे २ वचन जो अपने अनुकुल पाये, ग्रहण किये हैं और शेषार्द्ध का, जो प्रतिकूल पाये, परित्याग,

उन आधे अनुकूल में भी जो कोई शब्द अपने भाव से विरुद्ध देखे उन के अर्थ पलट दिये। पृष्ठ ४ पंक्ति ७ ऐसा न हो कि (अन्धेनैव नीयमाना यथाऽन्धाः) के सदृश केवल दयानन्दजी के भाष्य और भूमिका ही की लाठी थांभे किसी अथाह गढ़े वा घोरनरककुण्ड में जा गिरें। नि० २ पृष्ठ २। पंक्ति २४ खेद की बात है क्यों वृथा इतना कागज़ बिगाड़ा। पृष्ठ ५ पंक्ति २५ निदान जब मैंने गोतम और कणाद के तर्क और न्याय से न अपने प्रश्नों का प्रामाणिक उत्तर पाया और न स्वामीजी महाराज की वाक्यरचना का उससे कुछ सम्बन्ध देखा डरा कि कहीं स्वामीजी महाराज ने किसी मेम अथवा साहब से कोई नया तर्क और न्याय रूस, अमरीका अथवा और किसी दूसरी विलायत का न सीख लिया हो। इत्यादि वचन जो ये राजा शिवप्रसादजी ने अपने दोनों निवेदनों में लिखे हैं क्या इन को सुवचन गान्तीप्रदान कागज़ बिगाड़ना आदि कोई भी मनुष्य न समझेगा ?। मैंने राजा शिवप्रसादजी के दोनों निवेदनों और स्वामीजी के भ्रमोच्छेदन को भी देखा। प्रथम निवेदन में जो २ प्रश्न राजाजी के थे उस २ का उत्तर भ्रमोच्छेदन में यथायोग्य है ऐसा मैं अपनी छोटी विद्या और बुद्धि से निश्चित जानता हूं राजाजी और उन के साथियों की विशालबुद्धि है इसलिये उन के योग्य ठीक २ उत्तर न हुए होंगे। इसमें क्या अद्भुत है अब मैं अपनी अल्प विद्या और बुद्धि के अनुसार द्वितीय निवेदन के उत्तर में थोड़ासा लिखता हूं। निवेदन दूसरा पृ० ४ पङ्क्ति १६ भला सूर्य और घड़े की उपमा संहिता और ब्राह्मण में क्योंकर घट सकेगी अधर सूर्य के सामने कोई आधा घंटा भी आंख खोल के देखता रहे अन्धा नहीं तो चक्षुरोग से अवश्य पीड़ित होवे इस दृष्टान्त से राजाजी का यह अभिप्राय झलकता है कि वेद: दिनभर भी आंख खोल के देखा करे तो न अन्धा और न नेत्ररोग से युक्त होता है यहां उनका ऐसा अभिप्राय विदित होता है कि यह दृष्टान्त स्वामीजी का यहां घट नहीं सकता। जहांतक विचार के देखते हैं तो यही निश्चय होता है कि दृष्टांत का साधर्म्य वा वैधर्म्य गुण ही दार्ष्टान्त में घटता है सब गुण कर्म स्वभाव कभी नहीं (जैसे साध्य साधर्म्यात्तद्धर्मभावी दृष्टान्त उदाहरणम्) न्या० अ० १। आ० १। सू० ३६ (तद्विपर्ययाद्वाविपरीतम्) न्या० अ० १। सू० ३७। शब्दोऽनित्य इति प्रतिज्ञा उत्पत्तिधर्मकत्वादिति हेतुः। उत्पत्तिधर्मकं स्थाल्यादि द्रव्यमनित्यमिति दृष्टान्त उदाहरणम्। यह शान्तवृत्ति से देखने की बात है कि शब्द में अनित्यत्व धर्म साध्य है क्योंकि उत्पत्ति धर्मवाला होने से जो २ पदार्थ उत्पन्न होते हैं वे २ सब अनित्य हैं। जैसे स्थाल्यादि द्रव्य उत्पत्ति धर्मवाले होने से अनित्य हैं वैसे कार्य्य शब्द भी अनित्य है यहां केवल स्थाल्यादि पदार्थों का

उत्पत्ति धर्म ही कार्य शब्द में दृष्टान्त के लिये घटा के कार्य शब्दों को अनित्य ठहराया है यह तो कोई भी नहीं कह सकता कि घट पटादि पदार्थों में चक्षु से दीखना स्थूल कठोर और अन्धेरे में दीपक की अपेक्षा रहना आदि विरुद्ध धर्म हैं इसलिये उनका दृष्टान्त शब्द में नहीं घटेगा वा शब्द में भी वे धर्म हों कि दीपक जला के शब्द देखा जावे राजाजी को अन्धेरे में दीपक से शब्द देखना उससे पानी आदि लाना चाहिये वा इस दृष्टान्त ही को न माने तो ऐसा दृष्टान्त कोई न मिलेगा कि जिसमें दार्ष्टान्त के सब धर्म बराबर मिल जावें। और जो कोई पदार्थ ऐसे भी हों कि जिनके सब धर्म बराबर मिलें तो उनका परस्पर अभेदान्वय होने से उनमें दृष्टान्त दार्ष्टान्त तथा उपमान उपमेयभाव कुछ भी न बन सकेगा। अब यहां प्रकृत में यह आया कि वेद को सूर्य का दृष्टान्त दिया है तो सूर्य अपने प्रकाश में किसी की अपेक्षा नहीं रखता वैसे वेदों से भी जो अर्थ प्रकाशित होते हैं उनमें ग्रन्थान्तर की अपेक्षा नहीं है स्वयं प्रकाशत्व धर्म दोनों का समान है। और जैसे उत्पत्ति धर्मवाले न होने से आत्मादि द्रव्य नित्य हैं वैसा शब्द नहीं क्योंकि उत्पत्ति धर्मवाला है यहां केवल वैधर्म्य अर्थात् कार्य्य शब्द के अनित्यत्व धर्म से विरुद्ध आत्मा का नित्यत्व धर्म ही दृष्टान्त के लिये घटाया है किन्तु जो आत्मा और शब्द के अमेयत्व आदि साधर्म्य हैं वे विवक्षित नहीं। जैसा राजाजी का दृष्टान्त विषयक मत है वैसा किसी विद्वान् का नहीं कि दार्ष्टान्त के सब धर्म दृष्टान्त में घट सकते हों। नि० २ पृष्ठ ४। पं० १६। राजाजी स्वामीजी से पूछते हैं कि (स्वामीजी महाराज यह बतलावें कि पाणिनी आदि ऋषियों ने कहां ऐसा लिखा है कि मंत्रसंहिता ही वेद हैं ब्राह्मण वेद नहीं है) इसका उत्तर अब यह ब्राह्मण शब्द लौकिक है वा वैदिक इसके वैदिक होने में तो कोई प्रमाण नहीं मिलता लौकिक होने में प्रमाण देखो ॥

तत्र लौकिकास्तावत्। गौरश्वः पुरुषो हस्ती शकुनिर्मृगो ब्राह्मण इति। वैदिकाः खल्वपि। शन्नो देवीरभिष्टये इषे त्वोर्जेत्वा। अग्निमीलेपुरोहितम्। अग्न आयाहि वीतय इति।

अब यहां अन्तस्थः नेत्रों से देखना चाहिये कि वैदिक शब्द में केवल ४ मंत्र संहिताओं के उदाहरण दिये हैं जो ब्राह्मण भी वेद होते तो वैदिक शब्दों में उन का उदाहरण क्यों न देते ?, अब कोई यह कहे कि लौकिक शब्दों में जिस ब्राह्मण शब्द का उदाहरण दिया है वह नपुंसकलिंग न होने से ग्रन्थवाची शब्द नहीं है किन्तु पुलिङ्ग होने से

मनुष्यों में जातिविशेष का नाम है तो उससे पूछना चाहिये कि नपुंसकलिङ्ग ग्रन्थवाची ब्राह्मण शब्द का वैदिक शब्दों में पाठ क्यों न किया ? । हां, प्रकरण से अर्थ की सङ्गति होती है सो यहां किसी का प्रकरण नहीं है । यहां पतञ्जलिजी महाराज के प्रमाण से यह सिद्ध होगया कि मन्त्रसंहिता ही वेद हैं ब्राह्मण नहीं । अब स्वामीजी पर जो प्रश्न था उस का तो यह उत्तर पतञ्जलि ऋषि के प्रमाण से हुआ परन्तु वही प्रश्न राजाजी के ऊपर गिरता है कि राजाजी यह बतलावें कि पाणिनि आदि महर्षियों ने ऐसा कहां लिखा है कि मन्त्र और ब्राह्मणभाग दोनों वेद हैं अस्तु तावत् । निवे० २ । पृष्ठ ५ । पं० १८ । पाणिनि ने तो जहां मन्त्र और ब्राह्मण दोनों के लेने का प्रयोजन देखा स्पष्ट 'छन्दसि' कहा अर्थात् वेद में अर्थात् मन्त्र और ब्राह्मण दोनों में और जहां केवल मन्त्र वा ब्राह्मण का प्रयोजन देखा (मन्त्रे) वा (ब्राह्मणे) कहा और जहां मन्त्र और ब्राह्मण अर्थात् वेद के सिवाय देखा वहां 'भाषायाम्' कहा, राजाजी को यह लिखना तो सुगम हुआ परन्तु निम्नलिखित प्रमाण पाणिनिसूत्र और वेदमन्त्र आदि का अर्थ करके अपने पक्ष में घटाना सुगम क्योंकर होसकेगा । अब देखिये-छन्दो ब्राह्मणानि च तद्विषयाणि । अ० ४ । पा० २ । सू० ६६ । इस सूत्र में प्रोक्त प्रत्ययान्त छन्द और ब्राह्मण को अध्येतृ वेदितृ विषयता विधान की है अर्थात् प्रोक्तप्रत्ययान्त छन्द और ब्राह्मण का अध्येतृ वेदितृ अभिधेय में ही प्रयोग हो स्वतन्त्र न हो । अब राजाजी के इस लेखानुसार कि (जहां मन्त्र और ब्राह्मण दोनों के लेने का प्रयोजन देखा स्पष्ट "छन्दसि" कहा) इससे पाणिनि के इस सूत्र में ब्राह्मण ग्रहण व्यर्थ होता है । क्योंकि जो छन्द के कहने से मन्त्र और ब्राह्मण दोनों का ही ग्रहण हो जाता तो फिर यहां ब्राह्मण का पृथक् ग्रहण क्यों किया इससे स्पष्ट ज्ञापक होता है कि छन्द से ब्राह्मण पृथक् है । निवे० २ । पृष्ठ ५ । पं० २२ । से (भला जैमिनि महर्षि के पूर्वमीमांसा को तो स्वामीजी महाराज मानते हैं उस में इन सूत्रों का अर्थ क्योंकर लगावेंगे) तच्चोदकेषु मंत्राख्या । अ० १ । पा० २ । सू० ३२ । शेषे ब्राह्मणशब्दः । अ० २ । पाद १ । सू० ३३ । इसका अर्थ बहुत स्पष्ट है वेद का मन्त्रों से अवशिष्ट जो भाग सो ब्राह्मण) यह अनुभवार्थ राजाजी ने शबर स्वामी की टीका में से सुना होगा परन्तु यहां यह भी विचार करना उनको योग्य था कि इन सूत्रों के सम्बन्ध में कहीं वेदसंज्ञा निर्वचनाधिकरण है वा नहीं किन्तु यहां तो केवल मंत्रनिर्वचनाधिकरण और ब्राह्मणनिर्वचनाधिकरण है इससे फिर मंत्र और ब्राह्मण दोनों की वेदसंज्ञा है यह अभिप्राय कहां से सिद्ध हो सकता है जो इस प्रकरण में ऐसा होता कि (अथ

वेदनिर्वचनाधिकरणम्) तो राजाजी का अभिप्राय अवश्य सिद्ध हो जाता । परमात्मा ने वेदस्थ वाक्यों से सर्व विद्याभिधान कर दिया है अब इनमें शेष अर्थात् बाक़ी पढ़ना पढ़ाना सुनना सुनाना व्याख्या करनी करानी आदि है और थी भी जो थी सो ब्रह्मा से लेकर जैमिनिमुनिपर्यन्त महर्षि महाशय लोगों ने कर दी है जिससे ये ऐतरेय आदि ग्रन्थ ब्रह्म अर्थात् वेदों का व्याख्यान है इसीसे इनका नाम ब्राह्मण रक्खा है अर्थात् "ब्रह्मणां वेदानामिमानि व्याख्यानानि ब्राह्मणानि अर्थात् शेषभूतानि सन्तीति" । परन्तु जहां से इन सूत्रों के अर्थ में राजाजी आदि को भ्रम हुआ है सो शबर स्वामीजी की इसी सूत्र पर यह व्याख्या है (अथ किंलक्षणं ब्राह्मणम्) (मन्त्राश्च ब्राह्मणञ्च वेदः) विचार योग्य बात है कि न जाने शबर स्वामी ने इन दो सूत्रों में वेद शब्द कहां से लिया और इनकी अद्भुत कथा को देखिये कि (प्रश्न) ब्राह्मण का क्या लक्षण है ? (उत्तर) मन्त्र और ब्राह्मण वेद है विद्वान् लोग विचार लेंगे कि जैसा प्रश्न किया था वैसा ही उत्तर शबर स्वामी ने दिया है वा नहीं ? यहां विशेष लिखने की आवश्यकता नहीं । किन्तु "आम्रान् पृष्टः कोविदारानाचष्टे" । इस न्याय के तुल्य यह व्याख्या है ऐसा ही निवे० दू० २ । पृष्ठ ५ । पं० २५ । निदान जब मैंने गोतम और कणाद के तर्क और न्याय से न अपने प्रश्न का प्रामाणिक उत्तर पाया और न स्वामीजी महाराज की वाक्यरचना का उनसे कुछ सम्बन्ध देखा डरा कि कहीं स्वामीजी महाराज ने किसी मेम वा साहब से कोई नया तर्क और न्याय, रूस अमरीका अथवा और किसी दूसरी विलायत का न सीख लिया हो, स्वामीजी ने जो भूमिका में गोतम न्याय का प्रमाण वेदब्राह्मण विषय में लिखा है उसको वही पुरुष समझ सकता है कि जिसने उन ग्रन्थों की शैली देखी हो । बिना पढ़े सब विद्या किसी को नहीं आ जाती । और जिन्हों ने उन शास्त्रों में अभ्यास ही नहीं किया वेही ऐसा अनर्गल लिख सकते हैं कि गोतम और कणाद के तर्क न्याय से अपने प्रश्नों का प्रामाणिक उत्तर न पाया इत्यादि । अब राजाजी को शास्त्रों में अभ्यास करना अवश्य हुआ क्योंकि उनके प्रश्नों का उत्तर कोई नहीं दे सकता । और स्वामीजी महाराज जो किसी दूसरी विलायत का तर्क न्याय सीख भी लेते तो क्या आश्चर्य और कौनसा यह बुरा काम था और जो सीख लेते तो अपने ग्रन्थों में भी प्रमाण के लिये अवश्य लिखते या लिखवा लेते । इससे स्पष्ट विदित होता है कि राजाजी ने ही उन विलायतियों से तर्क न्याय कुछ पढ़ा नहीं तो इस का प्रसङ्ग ही क्या था । ठीक है । "यादृशी भावना यस्य बुद्धिर्भवति तादृशी"—इन के प्रश्नों का उत्तर जब ऋषि मुनियों के ग्रन्थों से भी न

हुआ तो सब ऋषियों से बढ़ के राजाजी हो गये इससे स्पष्ट सब महात्मा ऋषि लोगों की निन्दा आ जाती है (निवे० २ । पृष्ठ ६ । पं० ४ । फरिङ्गस्तान के विद्वज्जनमण्डलीभूषण काशीराजस्थापित पाठशालाध्यक्ष डाक्टर टीबो साहब बहादुर को दिखलाया । बहुत अचरज में आये और कहने लगे कि हम तो स्वामीजी महाराज को बड़ा पण्डित जानते थे पर अब उनके मनुष्य होने में भी सन्देह होता है तब तो भ्रमोच्छेदन को भ्रमोत्पादन कहना चाहिये) बस अब तो राजाजी का पक्ष दृढ़तर सिद्ध होगया होगा क्योंकि जब उक्त महाशय साहब ने स्वामीजी के मनुष्य होने में सन्देह और भ्रमोच्छेदन का भ्रमोत्पादन नाम होने की साक्षी दी है फिर क्या चाहिये क्योंकि महाशयों की साक्षी भी गम्भीर आशययुक्त होती है क्या ऐसी साक्षी को कोई भी मनुष्य मानेगा कि स्वामीजी के मनुष्य होने में भी सन्देह है । निवे० २ । पृष्ठ ७ । पं० २० । डाक्टर टीबो साहब की साक्षी का परामर्श यह देखिये चित्त धर के (दयानन्दसरस्वती सिवाय एक उपनिषद् के ब्राह्मण और उपनिषद् ग्रन्थों को छोड़ देते हैं और केवल संहिताओं को प्रमाण मानते हैं) इस का उत्तर तो भ्रमोच्छेदन के पृष्ठ ११ । पं० २० में यह स्पष्ट लिखा है (परन्तु जो २ वेदाऽनुकूल ब्राह्मणग्रन्थ हैं उनको मैं मानता और विरुद्धार्थों को नहीं मानता हूं) जो उक्त साहब ध्यान देकर देखते तो सिवाय एक उपनिषद् के इत्यादि विरुद्ध साक्षी क्यों देते । निवे० २ । पृष्ठ ७ । इसी उत्तर और इस विषय से आगे जो २ उक्त साहब ने लिखा है उस २ का उत्तर इसी उत्तर के आगे भ्रमोच्छेदन में लिखा है । निवे० २ । पृष्ठ ८ । पं० १८ (निःसन्देह दयानन्द सरस्वतीजी को अधिकार नहीं कि कात्यायन के उस वचन को प्रक्षिप्त बतावें जिसके अनुसार मन्त्र और ब्राह्मण का नाम वेद सिद्ध होता है ऐसे तो जो जिस किसी वचन को चाहे अपने अविवेक कल्पित मत से विरुद्ध पाकर प्रक्षिप्त कह दें) मुझ को अपनी अल्पबुद्धि से आज तक यह निश्चय था कि सत्याऽसत्य विचार करने का अधिकार सब विद्वानों को है जो यह राजाज्ञावत् डाक्टर टीबो साहब की सम्मति सत्य हो तो ऐसा हो जाय किन्तु जो केवल एक डाक्टर टीबो साहब ने ही ठेका लिया हो कि अन्य सब को अधिकार है केवल स्वामीजी को नहीं कि कौन प्रक्षिप्त और कौन नहीं ऐसा विचार करें जो ऐसा तो डाक्टर टीबो साहब को सम्मति देने और खण्डन मंडन का अधिकार किसने दिया है ? हम भी पूछ सकते हैं अहो आश्चर्य्य इस सृष्टि में कैसी २ अद्भुत लीला देखने में आती है । निवे० २ । पृ० ६ । पं० ५ । (सो मेरा तो अभिप्राय इतना ही है कि यदि ब्राह्मण ग्रन्थों के अनुसार जमदग्नि आदि का अर्थ यों ही माना जावे तो संहिता के समान ब्राह्मणों

को भी वेद भाग अथवा माननीय मानने में उन्हीं ब्राह्मणग्रन्थों की युक्तियां क्यों न मानी जावें) जो इस बात का प्रमाण किया जावे तो यास्कमुनिकृत निघण्टु, निरुक्त, पाणिनिमुनिकृत अष्टाध्यायी, पतञ्जलि महामुनिकृत महाभाष्य और पिङ्गलाचार्यकृत पिङ्गलसूत्र वेदों के भाष्य वा टीका आदि को भी वेद क्यों न माना जावे क्योंकि जैसे शतपथादि ग्रन्थों से वेदस्थ जमदग्नि आदि शब्दों के अर्थ चक्षु आदि माने जाते हैं वैसे ही निघण्टु और निरुक्त आदि से भी वैदिक शब्दों के संज्ञा और निर्वचन व्याकरण से शब्द अर्थ और सम्बन्ध और पिङ्गलसूत्रों से गायत्र्यादि छन्द, षड्जादि स्वर आदि की व्याख्या वेदों से अविरुद्ध मानी जाती है तो इनकी वेदसंज्ञा कौन कर सकेगा। निवे० २। पृष्ठ ६। पं० १०। (सो यहां भी मेरा तो अभिप्राय इतना ही है कि वेद के नाम से मन्त्रभाग अर्थात् संहिता और ब्राह्मणों को मान कर जहां वेदों को अपरा कहा जाय वहां मन्त्र और ब्राह्मणों का कर्मकाण्ड और जहां वेदों को परा कहा जाय वहां मन्त्र और ब्राह्मणों का ज्ञानकाण्ड मानना चाहिये) निवे० १। पृष्ठ ११। पं० १०। (इसका अर्थ सीधा २ यह मान लेवें कि आपके चारों वेद और उनके छओं अङ्ग "अपरा" हैं जो "परा" उस से अक्षर में अधिगमन होता है अपना फिरावट का अर्थ वा अर्थाभास छोड़ दें) निवे० १। पृष्ठ १२। पं० २०। (नोट- कि चारों वेदसंहिता और उनके छओं अङ्ग अपरा हैं परा उनके सिवाय अर्थात् उपनिषद हैं) मुझ को बड़ा आश्चर्य हुआ कि यहां क्यों राजाजी ने अपने पूर्व लेख से अपर लेख को विरुद्ध लिखा देखो पहिले निवेदन में चारों वेद और छओं अङ्गों को अपरा और उपनिषदों को परा विद्या मानी थी और दूसरे निवेदन में चारों वेदों के कर्मकाण्ड को अपरा और उन के ज्ञानकाण्ड को परा विद्या मानी और दोनों निवेदनों का अभिप्राय यही है कि मन्त्रभागसंहिता और ब्राह्मणभाग को वेदसंज्ञा मानें इसलिये इतना परिश्रम उठाया और नोट में चारों वेद संहिता अर्थात् मन्त्रसंहिताओं ही को वेद मान कर ब्राह्मणों को वेदसंज्ञा में लिखना भूल गये दृष्टि कीजिये (तत्रापरा ऋग्वेदो, यजुर्वेदः, सामवेदो, अथर्ववेदः) राजाजी के इस लेख ने उन्हीं के अभिप्राय का निराकरण कर दिया इसको न लिखते तो अच्छा था क्योंकि इस लेख में ऋग्यजुः साम और अथर्व चार शब्द वाच्य मन्त्रभागसंहिताओं ही के साथ चार बार वेद शब्द का पाठ है। ऐतरेय शतपथ छान्दोग्य ताण्ड्य आदि और गोपथ ब्राह्मण ग्रन्थों की उस वचन में न परा न अपरा में गणना और न ऐतरेय आदि शब्दों के साथ वेद नाम का पाठ है इसलिये यह पूर्वापर विरुद्ध लेख है। निवे० २। पृष्ठ ६। पं० १४।

(ऐसा ही आज तक वैदिक हिन्दू परम्परा से मानते चले आये हैं) यहां भी मैं राजाजी से यह पूछता हूं कि परम्परा और आज तक इस वाक्यावली का अभिप्राय सृष्ट्युत्पत्ति से लेकर आज तक का समय लिया जाय वा जैसा कि चार पांच पीढ़ियों में परम्परा हो जाती है वैसी ग्रहण की जाय जो प्रथम पक्ष है तो वैदिक के साथ आर्य्य शब्द लिखना उचित था अर्थात् वैदिक आर्य्य और जो चार पांच पीढ़ी की परम्परा अभिप्रेत है तो लोकाचार से भी वैदिक हिन्दू लिखना ठीक नहीं क्योंकि भारतवर्षवासी मनुष्यों की हिन्दूसंज्ञा सिवाय यवनग्रन्थ और यवनाचार्य्यों की पाठशाला में पठनपाठन-संसर्ग के विना राजाजी को कहीं न मिलेगी और ऋग्वेद से लेकर पूर्वमीमांसापर्य्यन्त संस्कृतग्रन्थों में तो एतद्देश का नाम आर्य्यावर्त्त और इस में रहनेवाले मनुष्यों का नाम आर्य्य वा ब्राह्मण आदि संज्ञा ही मिलेगी परन्तु यह राजाजी को स्वात्मानुभव वा इस देशियों पर द्वेष अथवा आर्य्यावर्त्त देश से भिन्न देशस्थ विलायतियों से शिक्षा पाकर बोध हुआ होगा। यह साधारण बात नहीं किन्तु जो यह वैदिक शब्दों के साथ हिन्दू शब्द का परम्परा से आज तक पढ़ देना। सो राजाजी की विदेशियों की विद्या और शिक्षा का अनुपम फल है। निवे० २। पृष्ठ १०। पं० ६। (भला आपके) (शिवप्रसाद के) एक सहज से प्रश्न का तो उत्तर श्रीस्वामी दयानन्द सरस्वतीजी से बना ही नहीं उत्तर के बदले दुर्वचनों की वृष्टि की, यदि काशीजी के पण्डित उनसे शास्त्रार्थ करने को उद्यत भी हों तो उत्तर के स्थान में उन्हें वैसे ही दुर्वचन पुष्पाञ्जलि का लाभ होगा इससे अतिरिक्त उसमें से कुछ भी सार नहीं निकलेगा (इस पर मैं अपनी बुद्धि के अनुसार इतना ही लिखता हूं कि जो श्रीयुत बालशास्त्रीजी 'श्रीमत् पंडितवरधुरन्धर अज्ञान-तिमिरनाशनैकभास्करविशेषणयुक्त ऐसा कहते हैं और ऐसा निश्चय हो तो स्वामीजी से उनके बड़े २ गम्भीराशय प्रश्नों के उत्तर कभी न बन सकेंगे फिर इस से मेरी और अन्य लाखों किंवा करोड़ो मनुष्यों की यह इच्छा है कि जो कोई विद्वान् स्वामी दयानन्द सरस्वतीजी के पक्ष को वेदादि शास्त्रद्वारा निरस्त कर दे तो उनको क्या ही लाभ न हो पुनः उक्त महाशय इस में क्यों विलम्ब कर रहे हैं और दुर्वचन पुष्पाञ्जलि विषय में इतना ही मैं लिखता हूं कि काशीस्थ लोगों ने दूषणमालिका, दयानन्दपराभूति, चर्मकार भी स्वामीजी से उत्तम गाली सहस्र नाम आदि पुस्तक और दण्डनीय, आदि विज्ञापन समाचारों में छपवाया तथा ताली शब्द आदि और जैसा असभ्य अनर्थ लेख स्वामीजी पर किया है और स्वामीजी ने संवत् १९२६ के शास्त्रार्थ में किसको गालीप्रदान

वा दुर्वचन पुष्पाञ्जलि की थी और जैसे पक्षपात क्रोध रहित होने के लिये स्वामीजी को लिखते हैं तो राजाजी ने पक्षपात और क्रोधयुक्त स्वामीजी को कब देखा था! भला क्या पूर्वोक्त तो सुवचन पुष्पाञ्जलि है और स्वामीजी का लेख दुर्वचन पुष्पाञ्जलि कहा जा सकता है डाक्टर टीबोसाहब बहादुर स्वामी दयानन्दसरस्वतीजी के मनुष्य होने में भी सन्देह लिखते हैं क्या डाक्टर टीबोसाहब को अपने सहीस आदि नौकरों के तो मनुष्य होने में कुछ भी संदेह नहीं किन्तु केवल स्वामीजी के मनुष्य होने में संदेह करते हैं क्या यह बात अद्भुत गंभीराशय और असङ्गत नहीं है ?, अहो क्या ऐसे २ लेख को भी बुद्धिमान् लोग अच्छा समझेंगे, धन्य है! श्रीयुत शिवप्रसादजी वादी और धन्य है! उनके साक्षी अर्थात् श्रीमज्जगत्पूज्यस्वामी विशुद्धानन्दसरस्वतीजी श्रीमत् पण्डितवरधुरन्धर अज्ञानतिमिरनाशनैकभास्कर बालशास्त्रीजी महाराज आर्यजन और विद्वज्जनमण्डलीभूषण काशीराजस्थापितपाठशालाध्यक्ष डाक्टर टीबोसाहब बहादुर योरूपियन्, कि जिन्होंने परस्पर मिलकर अपना अभीष्ट मत प्रकाशित किया है क्या भला ऐसे २ महाशयों के सामने मेरा लेख हास्यास्पद न होगा और क्या ऐसे २ महात्माओं की साक्षी होने पर राजाजी के विजय होने में किसी को सन्देह भी रहा होगा वाह! वाह!! वाह!!! जो कोई परपक्षनिषेध और स्वपक्ष सिद्ध करे तो ऐसीही बुद्धिमत्ता से करे क्या सहायक अनुमतिदायक भी ऐसे होने योग्य हैं जहां अर्थी ही साक्षी और न्यायाधीश हों वहां जीत क्यों न होवे क्यों न हो क्या यही सत्पुरुषों का काम है कि जहांतक बने दूसरे की निन्दा अपनी स्तुति करनी अपना सुकर्म समझना हां मैं भी तो राजा शिवप्रसादजी और स्वामी विशुद्धानन्द सरस्वतीजी वा बालशास्त्रीजी और डाक्टर टीबोसाहब बहादुर साक्षी आदि महाशयों के सामने स्वामीजी की मनमानी निन्दा और अप्रतिष्ठा करने में तत्पर होता जो उनके प्रशंसनीय गुणकर्मस्वभाव न जानता होता उनकी निन्दा और अपमान करने में कमती कभी करता परन्तु बाल्मीकि मुनि ने कहा है कि (सहवासी विजानीयाच्चरित्रं सहवासिनाम्) विना किसी के सङ्ग किये उसके गुण दोष विदित नहीं हो सकते संवत् १९२८ से १९३७ के वर्ष पर्यन्त मेरा और स्वामीजी का समागम रहा है जितने वर्ष वा महीने स्वामीजी का सत्सङ्ग मैंने किया है और यथाबुद्धि थोड़े से वेद भी देखे हैं उतने दिन और उतने मुहूर्त्त भी उन का समागम राजाजी आदिने न किया होगा नहीं तो इतना अटाटूट विरोध कभी न करते। देखिये कई एक बड़े २ सेठ साहूकार रईस बुद्धिमान् पण्डित सज्जन लोग राजे महाराजे स्वामीजी को अत्यन्त मानते, श्रद्धा करते और उपदेश का भी

स्वीकार करते हैं और बहुतेरे विरुद्ध भी हैं तथापि कभी किसी का पक्षपात किसी से लोभ किसी का भय किसी की खुशामद किसी से छल वा किसी से धन हरने का उपाय वा किसी से स्वप्रतिष्ठा की चेष्टा आदि अशिष्ट पुरुषों के कर्म करते इन को मैंने कभी नहीं देखा और क्या जैसी सब की सत्य बात माननी और असत्य न माननी स्वामीजी की रीति है वैसी ही राजाजी आदि को मानने योग्य नहीं है ! परन्तु इतने पर भी मैं बड़े आश्चर्य्य में हूं कि राजाजी आदि महाशय निष्कारण ईर्षा और परोत्कर्षासहनरूप यानारूढ़ होकर स्वामीजी की बुराई करने में बढ़ते ही चले जाते हैं न जाने कब और कहां तक बढ़ेंगे क्या इस का फल आर्य्यावर्त्तादि देशों की अनुन्नति का कारण न होगा ? क्यों न यह घर की फूटरूपी रसास्वादन का प्रवाह दुर्योधनरूप हलाहल सागर से बहता चला आता हुआ आर्य्यावर्त्तस्थ मनुष्यों के अभाग्योदयकारक प्रलय को प्राप्त अब तक न हुआ क्यों इसको परमेश्वर अपने कृपाकटाक्ष से अब भी नहीं रोक देता कि जिससे हम सब सर्वतन्त्र सिद्धान्तरूप प्रेमसागरामृतोदधि में स्नान कर त्रिविध ताप से छूटकर परमानन्द को प्राप्त हों जैसे द्वीपद्वीपान्तर के वासी मुसलमान, जैन, ईसाई आदि मनुष्य अपने स्वदेशी और स्वमतस्थों को आनन्दित कर रहे हैं क्या ऐसे हम लोगों को न होना चाहिये प्रत्युत सब देशस्थ समग्र मनुष्यादि प्राणिमात्र के लिये परस्पर उपकार विद्या शुभाचरण और पुरुषार्थ कर अपने पूर्वज कि जिन महाशय आर्यों के हम सन्तान हैं उनका दृष्टान्त अर्थात् उपमेय न हों और जैसी उनकी कीर्ति और प्रतापरूप मार्त्तण्ड भूगोल में प्रकाशित होरहा था उन का अनुकरण क्यों न करें और इस में आश्चर्य्य कोई क्यों मानें कि राजाजी और उन के अनुयायी साक्षी स्वामीजी को अविद्वान् पशु अन्धे आदि यथेष्ट शब्दों से निन्दा करते हैं मैं निश्चित कहता हूं कि स्वामीजी की निन्दा अप्रतिष्ठा और विरोधता किस ने नहीं की काशी में संवत् १९२६ वें वर्ष में उन पर हल्ला किया संखिया मिलाकर पानबीड़ा दिया बुरी २ निन्दा के पुस्तक और विज्ञापन दिये कई ठिकाने मारने को आये ऊपर पत्थर और धूल फेंकी जिले बुलन्दशहर करणवास के समीप जहां स्वामीजी रहते थे वहीं किसीने रात के १ बजे के समय १० आदमी तलवार और लट्ठ लेकर मारने को भेजे कई नास्तिक कहते कई क्रश्चीन बतलाते कई क्रोधी और कई पशुवत् नीच विशेषण देते कई उनका मुख देखने में पाप बतलाते और पास जाने को अच्छा नहीं कहते कोई कलि का अवतार कोई कल मरते आज ही मरजाय तो अच्छा कई मजिस्ट्रेटों के कान भर व्याख्यान बन्द करा देने में प्रयत्न कर चुके और कोई इनके बनाये पुस्तक भी हाथ में न लेना न देखना कई

अपने बाग बगीचों में उन का रहना भी स्वीकार नहीं करते कई वेश्या का मुख देखने, सङ्ग करने और पुंसि मैथुनाचरण में भी अपना धन्य जन्म मानते और औरों को उत्साहित करते हैं और स्वामीजी के दर्शन और सङ्ग उस से भी बुरा बतलाते है कई स्वामीजी और स्वामीजी के उपदेश माननेवालों को महानरक में गिरना चितलाते है । आप गौतम और कणादादि महाशयो से अपने को बुद्धिसागर ठहराते और स्वामीजी को निर्बुद्धि सहज प्रश्नो के उत्तर के अदाता कहते और कई चमार चाण्डाल आदि में विद्वत्ता और मनुष्य होने की शङ्का नहीं करते और स्वामीजी में विद्वत्ता के होने और मनुष्यपन में भी शङ्का बतलाते हैं कोई रेल का भाड़ा भी नहीं लगता ऐसा कहते है अब कहांतक इस लम्बी गाथा को कहूं । मै ऐसी बातें सुनता और लिखता हुआ थकित हो गया क्या ये पूर्वोक्त बातें आर्य्यावर्त्त के दौर्भाग्य के कारण नहीं हो रही हैं तथापि धन्य है स्वामीजी को इतने हुए परभी सनातन वेदोक्त आर्य्योन्नति के यत्नो से विरक्त न होकर परोपकार से अपना जन्म सफल कर रहे है भला जो धर्म्म और परमात्मा की कृपा न होती और परमत द्वेषी स्वमतानुरागी क्षुद्राशय लोगों का राज्य होता तो स्वामीजी का आज तक शरीर बचना भी दुस्तर न हो जाता क्या जो आर्य्य लोग भी मुसल्मान आदि के तुल्य होते तो अब तक स्वामीजी का मुख और हस्त वेदभाष्यादि पुस्तक लिखने के लिये आज तक कुशल रह सकते ? और जो स्वामीजी में पक्षपात राहित्य सत्यता विद्वत्ता शान्ति निन्दा स्तुति में हर्ष शोक रहितता न होती और विमलविद्याप्रगल्भता धार्मिकता आप्तत्वादि शुभ गुण न होते तो ऐसे २ सनातन वेदोक्त सत्य धर्मोपदेशादि प्रशंसनीय आर्य्योन्नति के दृढ़ कारण प्रकाशित और सुस्थिर कभी न कर सकते क्योकि देखो आर्य्यावर्त्त में प्रशंसनीय महाशय विद्वानों के विद्यमान रहने भी आर्य्यावर्त्तीय मनुष्यो की वेदोक्त धर्माढ्यता प्राचीन अभ्युदयोदय प्रच्छन्न क्यों रह जाता क्या प्रत्यक्ष में भी भ्रम है कि देखिये जो हम आर्यों को विना आसमानी किताब वाले बुत्परस्त नालायक इन के मत का कुछ भी ठिकाना नहीं आदि आक्षेपो से जैन मुसल्मान और इसाई लाखहू क्रोड़हू बहुत को अपने मत में मिलाते और कहते थे कि आओ हमसे वादविवाद करो हमारा मजहब सच्चा और तुम्हारा झूठा है वे ही अब स्वामीजी के सामने वेदादि शास्त्रों और तदुक्त आर्य्यधर्म का खण्डन तो दूर रहा परन्तु वाद करना भी असह्य समझते और कहते है कि आप हम पर प्रश्न मत कीजिये डरते है स्वामीजी के सन्मुख तो ऐसा है परन्तु जिन्होंने स्वामीजी के ग्रन्थ देखे और उनका समागम यथावत् किया है उनके भी सामाने

वे विजयवन्त नहीं हो सकते इत्यादि जो राजाजी आदि स्वामीजी के स्तुत्य गुण कर्म स्वभाव जानते तो उनके साथ ऐसा विरुद्ध वर्त्तमान कभी न करते। सर्वशक्तिमान् सर्वान्तर्यामी सर्वव्यापक सर्वनियन्ता जगदीश्वर सब आर्य्यों के आत्माओं में परस्पर प्रीति गुण स्वीकार दोषपरिहार वेदविद्योन्नतिरूप कल्पवृक्ष और चिन्तामणि को सुस्थिर करे जिससे सब आर्य्य भाई उसको परस्पर प्रेम और उपकाररूप सुन्दर जल से सींचकर उसके आश्रय से प्राचीन आर्य्य पदवी को पाकर आनन्द में सदा रहें और सब को रक्खें ॥

राजाजी का बनाया इतिहास मैंने देखा तो अद्भुत बातें दिखाती हैं इनसे यह भी प्रसिद्ध है कि जो स्वश्लाघा और अभिमान करेगा तो इतना ही करेगा निम्न लेख से यह बात सब को विदित हो जायगी क्योंकि इङ्गित चेष्टित से मनुष्य का अभिप्राय गुप्त नहीं रह सकता राजाजी का कुछ अभी ऐसा वर्त्तमान है सो नहीं किन्तु (स्वभावो नान्यथा भवेत्) जैसा स्वभाव मनुष्य का होता है वह छूटना दुस्तर है जो उन्होंने इतिहासतिमिरनाशक ग्रन्थ बनाया है उसको कोई विद्वान् पक्षपातरहित सज्जन पुरुष ध्यान देकर देखे तो राजाजी की मानसपरीक्षा और सौजन्य विदित अवश्य हो जावे कि इनका क्या अभीष्ट है उसमें अप्रमाण वेदादिशास्त्राभिप्रायशून्य बहुत बातें हैं और कुछ अच्छी भी हैं जो अच्छी हैं उनका स्वीकार और जो अन्यथा हैं उनके संक्षेप से दोष भी प्रकाशित करता हूं जैसे मुझ को विदित होता है इतिहासतिमिरनाशक पृष्ठ १। पंक्ति ११ (बाप, दादा और पुरखा तो क्या हम इस ग्रन्थ में उस समय से लेकर जिससे आगे किसी को कुछ मालूम नहीं आज पर्य्यन्त अपने देश की अवस्था लिखने का मंसूबा रखते हैं) राजाजी थोड़ासा भी सोचते तो इतना अपना गौरव अपने हाथ से लिखने में अवश्य कम्प जाकर रुक के यथार्थ बात को समझ सकते। क्या अपने पुरुखों से स्वयं उत्तम और सब आर्य्यावर्त्त वासियों को इतिहासज्ञान विषय में निकृष्ट अज्ञानी कर स्वश्लाघी स्वयं नहीं बने हैं क्या कोई भी पूर्ण विद्वान् स्वमुख से अपनी कीर्त्ति को कह सकता है। यह सच है कि जितना २ विद्याविनय मनुष्य को अधिक होता है उतना २ वह सुशील निरभिमानी महाशय होता और जितना २ वह कम होता है उतनी २ उसको कुशीलता अभिमान और स्वल्पाशयता होती है। इति० पृष्ठ १—१६ (पुराना हाल जैसा इस देश का बेठौर ठिकाने देखने में आता है विरले किसी दूसरे देश का मिलेगा) वाह वाह वाह !!! न जाने किस देश की पाठशाला में इतिहासों को पढ़ के राजाजी को अपूर्वविज्ञान हुआ क्या यूरोप अमेरिका एफरीका आदि देशों के पूर्व इतिहासों से भी आर्य्यावर्त्त देश का प्राचीन इति-

हाल बुरा है यह भी इन का लेख आर्य्य लोगों को ध्यान में रखना चाहिये । इतिहा० पृष्ठ ३ । पङ्क्ति २ । (आगे संस्कृत श्लोक बनाते थे अब भाषा में छन्द और कवित्त बनाते हैं क्योंकि गद्य का कण्ठस्थ रखना सहज है निदान ये भाट इसी में बड़ाई समझते है) क्या ही शोक की बात है कि मनु वाल्मीकि व्यास प्रभृति ऋषि महर्षि महात्मा महाशय ब्राह्मण लोगों को तो राजाजी भाट ठहराते हैं और आप महात्माओं के निन्दक और उपहासकर्त्ता होकर नकली की पदवी को धारण करते हैं, विदित होता है कि आर्य्यावर्त्तीय धार्मिक आप्तपुरुषों की निन्दा और विदेशियों की अत्युक्ति सदृश स्तुति ही से राजाजी प्रसन्न बनते हैं । इतिहा० पृष्ठ ४ । पं ३० । (हाय हमारे देश में इतना भी कोई समझनेवाला नहीं) सिवाय आप के ऐसी २ गूढ़ बातों के मर्म को कौन समझ सकता है तब ही तो आप सब से बड़ा मंसूबा बांध कर इतिहास लिखने को प्रवृत्त हुए । इतिहा० पृ० १० (बहुतेरे हिंदू यह भी कहेंगे कि जो बात पोथी में लिखी गई और परम्परा से सब हिंदू मानते चले आये भला अब वह क्योंकर झूठ ठहर सकती है) भला यहां तो हिन्दुओं की परम्परा का तिरस्कार राजाजी कर चुके और दोनों निवेदनों में ब्राह्मण पुस्तकों को वेद मानने के लिये स्वीकार किया है ठीक है मतलबसिन्धु ऐसी ही चतुराई से पूरा करना होता है । इतिहा० पृष्ठ १२ । प० १ से लेकर पृष्ठ १४ पं० ११ तक बौद्ध जैन हिंदुओं के मतविषयक बातें लिखी हैं इससे विदित होता है कि राजाजी का मत बौद्ध जैनी ही है । इसीलिये अपने मत की प्रशंसा वैदिकमत की निन्दा मनमानी की है । यह इन को अच्छा समय मिला कि कोई जाने नहीं और वैदिक मत की जड़ उखाड़ने पर सदा इन की चेष्टा है पुनः स्वामीजी जो सनातन रीति से वेदों का निर्दोष सत्य अर्थ ठीक २ प्रकाशित कर रहे हैं इन को अच्छा कब लग सकता है इसीलिये निवेदनों में भी अपनी सदा की चाल पर राजाजी चलते हैं इस में क्या आश्चर्य है । इतिहा० पृष्ठ १५ । पं० १ । (हिन्दुओं की प्राचीन अवस्था०) यह बड़ा अनर्थ राजाजी का है कि आर्यों को हिन्दू और पारस देश से आये हैं । पहिली बात तो इन की निर्मूल है क्योंकि वेदों से ले के महाभारत तक किसी ग्रन्थ में आर्यों को हिन्दू नहीं लिखा कौन जाने राजाजी के पुरखे पारस देश से ही इस देश में आये हों और उन का परम्परा से स्वदेश पारस का संस्कार अब तक चला आया हो क्या यह बात असम्भव है कि इस आर्य्यावर्त्त ही से कोई मनुष्य पारस देश में जा रहे हों क्योंकि पारस देश में उत्पन्न हुई मद्री पाण्डुराजा से विवाही थी उसी समय वा आगे पीछे वहां से यहां और यहां से वहां आ जा रहने का सम्भव होसकता है और क्या जो पारस

देश से आकर ही बसे होते तो पारसी लोगो वा ईरान वालों के प्राचीन इतिहासों में स्पष्ट न लिखते ? । इतिहा० पृ० १५ । पं० ५ (असुर को अहुर) नोट । पं० १३ । यहां भी ऋग्वेद के आरम्भ में असुर का अर्थ सुर लिया है और उसे सूरज का नाम माना है। (असुरः प्राणदाता । असुरः सर्वेषां प्राणदः । असुर राक्षस के लिये तभी से ठहराया गया जब से सुर, देव, देवता के लिये ठहरा इत्यादि) धन्य है (मुखमस्तीति वक्तव्यं दशहस्ता हरीतकी) इस में तो कुछ दोष नहीं कि असुर को वे पारसी लोग अहुर कहैं परन्तु जो बातें ऋग्वेद के नाम से राजाजी ने लिखी है सब निर्मूल हैं क्योंकि ऋग्वेद के आरम्भ में तो (असुरः प्राणदाता) (असुरः सर्वेषां प्राणदः) ये नहीं है किन्तु ऐसा पाठ ऋग्वेद भर में कहीं नहीं है । क्या आश्चर्य है कि ईरानवाले जिह से देव को राक्षस कहते हों । इतिहा० पृ० १५ । पं० ७ । (हिंदू अपने तई दूसरी जाति के लोगों से जुदा रहने के निमित्त आर्य पुकारते थे और इन्हीं के बसने से यह देश हिमालय से विन्ध्य तक आर्य्यावर्त्त कहलाया पारस देश वाले भी आर्य्य थे वरन इसी कारण उस को अब भी ईरान कहते हैं) क्या अद्भुत लीला है ईरानवाले तो अब तक ईरानी, पारस वाले पारसी ही बने रहे आर्य्य नाम वाले क्यों न हुए । कैसा झूठ लिखा है कि अपने जुदा रहने के लिये आर्य्य पुकारते थे । जो ऋग्वेद की कथा भी राजाजी ने सुनी होती तो (विजानीह्यार्य्यान्ये च दस्यवः) (उत शूद्रे उतार्य्ये) इन का अर्थ यही है (आर्य्य) श्रेष्ठ और (दस्यु) दुष्ट (आर्य्य) द्विज और (शूद्र) अनार्य को कहते हैं इस को जानते तो ऐसा अनर्थ क्यों लिख मारते जो ईरान से आर्य्य हो जाता है तो (आरा) और (अरि) आदि शब्दों से आर्य्य सिद्ध करने में किसी को राजाजी न अटका सकेंगे। ऐसे बहुत पुरुष अपनी प्रशंसा के लिये विदेशियों की झूठी खुशामद किया ही करते है। इतिहा० १५ । पं० २८ (ईरान की पुरानी पारसी भाषा में एक प्रकार की संस्कृत थी अर्थात् उसी जड़ से निकली थी जिस से संस्कृत निकली है) भला पारसी पढ़े विना ऐसी २ गुप्त जड़ों की खोज राजाजी न होते तो कौन करता जो थोड़ासा भी विचार करते तो श्रेष्ठ गुणों से आर्य्य और एक किसी मनुष्य का नाम है आर्य्य उससे और इस देशवालों से क्या सम्बन्ध हो सकता है जिनमे दृष्टान्त संस्कृत पुरानी पारसी के उदाहरण दिये हैं ये सब संस्कृत से पुरानी पारसी बनी है यह ठीक है क्योंकि पारस देश का नाम निशान भी न था तब से आर्य्य और आर्य्यावर्त्त देश है। जब पाण्डवों ने राजसूय यज्ञ किया है तब यवन देश के सब राजा आये थे उसी ईरान का राजा शल्य भी महाभारतयुद्ध में आया ही था इसलिये राजाजी का ऐसा अनुभव

केवल पारसी भाषा पढ़ने से हुआ है संस्कृत से नहीं । इतिहास पृष्ठ १६ । पं० २ । से (ये आर्य्य उस समय सूर्य्य के उपासक थे वेद में सूर्य्य की बड़ी महिमा गायी है हिन्दुओं का मूलमन्त्र गायत्री इसी सूर्य्य की वन्दना है विष्णु इसी सूर्य्य का नाम है) राजाजी का स्वभाव सब से विलक्षण है, कोई कहता हो दिन तो वे रात कहें यद्यपि वेदों में सूर्य्य शब्द से परमेश्वर आदि कई अर्थ प्रकरण से भिन्न २ कहे हैं परन्तु उपासना में सूर्य्य शब्द से जिसको गायत्री मन्त्र कहता और जो व्यापकता से विष्णु है वहां परमेश्वर ही लिया है अन्यत्र भौतिक । इतिहा० पृष्ठ १८ । पं० १ । (आकाश को इन्द्र ठगाया) वेदों में, इन्द्र शब्द से आकाश का ग्रहण कहीं नहीं किया है । हां राजाजी ने अपनी कल्पना से समझा होगा । इतिहा० पृष्ठ १८ । पं० ३ (गाय, बैल, घोड़ा, भेड़ और बकरी इत्यादि का बलि देते थे और उन का मांस भून भून और उबाल २ कर खाते थे । नोट—ऋग्वेद में एक अश्वमेध का हाल यों लिखा है घोड़े के आगे रङ्ग विरङ्ग की बकरियां रख कर उस से अग्नि की परिक्रमा दिलाई और फिर खम्भे से बांध कर और फरसे से काट कर उस का गोस्त सींक पर भूना और उबाला और गोले बना कर खा गये) हाय ! ऐसे अनर्थ लिखके वेद और आर्य्यों की निन्दा कर राजाजी ने संतुष्टि क्यों की क्योंकि गाय आदि पशुओं का मारना वेदों में कहीं नहीं लिखा न शराब का पीना और अश्वमेध का ऐसा हाल कहीं भी नहीं लिखा, राजाजी ने वाममार्गियों के सङ्ग से ऐसी बात कि जिससे वेदों की निन्दा हांसी हो लिखी होगी । इतिहा० पृष्ठ १६ । पं० १२ । (वर्णभेद शुरू में दो ही रहा होगा अर्थात् गोरा और काला वर्ण का अर्थ रंग है) वाह क्या चतुराई की लटा-झलिक रही है क्या गोरे और काले के बीच में कोई भी रंग नहीं होता और (वर्णं वाहुः पूर्वसूत्रे) वर्ण नाम अक्षर वर्ण नाम स्वीकार अर्थ क्या नहीं होते (स्वार्थी दोषन्न पश्यति) हां यह हो तो हो कि विना गोरों की प्रशंसा के स्वार्थसिद्ध क्योंकर होता) इतिहा० पृष्ठ २० से ले के अङ्गरेज़ के पैर पकरने अर्थात् ग्रन्थ की समाप्तिपर्य्यन्त राजा-जी ऐसी चाल चलन से चले हैं कि जिससे इस देश की बहुत बुराई और कुछ अन्य देशों की भी वेदादिशास्त्रों की निन्दा और जैनमत की इंगित से प्रशंसा और अङ्गरेज़ों की प्र-शंसा में जानों सब भाटों के प्रपितामह ही बन रहे है । क्या ही शोक की बात है कि इतिहासतिमि-रनाशक के तीसरे खण्ड में कितने बड़े वेद आदि शास्त्रों और आर्य्य तथा आर्य्यावर्त्त देश की निन्दा लिख कर छपवाई है तो भी राजाजी के चरित्र पर किसी आर्य्य विद्वान् ने विचार-कर प्रत्युत्तर नहीं किया मैंने अल्पसामर्थ्य से (स्थालीपुलाकन्याय) के समान थोड़ासा

नमूना राजाजी का दिखलाया है। इतने ही से सब बुद्धिमान् राजाजी के और मेरे गुण दोषों का विचार यथावत् कर ही लेंगे। जिन्हों ने वेद और आर्य्यावर्त्त की गर्हा करनी ही अपनी बड़ाई समझ ली है तो स्वामीजी की निन्दा करें इस में क्या आश्चर्य है सर्वशक्तिमान् परमात्मा परमदयालु सब पर कृपा रक्खे कि कोई किसी की निन्दा न करे सत्य को माने और झूठ को छोड़ दे मेरा यहां यह अभिप्राय नहीं है कि किसी की व्यर्थ निन्दा करूं वा मिथ्या स्तुति। हां इतना कहता हूं कि जितनी जिस की समझ है उतना ही कह और लिख सकता है मेरी धार्मिक विद्वानों से प्रार्थना है कि जो कुछ मुझ से अन्यथा लेख हुआ हो तो क्षमा करें और अपनी प्रशंसनीय विद्यायुक्त प्रज्ञा से उस को शुद्ध कर लेवें इस पर सत्य २ परामर्श का प्रकाश कर आर्य्यों को सुभूषित करें ॥

ऋषिकालाङ्कभूवर्षे तपस्यस्याऽसिते दले।
दिक्तिथौ वाक्पतौ ग्रन्थो भ्रमच्छेत्तुमकार्य्यलम् ॥

इति भीमसेनशर्म्मकृतोऽनुभ्रमो-
च्छेदनोग्रन्थः पूर्णः ॥



food in the ground led to the discovery of tillage. It may be that Palæolithic man hit on the discovery by observing the sprouting of grain left waste around his dwelling. Once early man discovered that seeds planted in the soil grew, a new world was opened up to him. Greater variety of food, a more stable supply of it, and more settled habits were some of the consequences of the discovery.

Though crops at first received no attention between sowing and reaping, the fact that they could not be uprooted and the fact that they could not be taken away to another place made some settlement inevitable. It checked migration in search of new food. The area of tillage was a magnet to the wandering tribe, and a stimulus to the invention of new tools. Gathering of the growing crop set a new problem, solved by the invention of the sickle. At first, it was a row of sharp flint flakes set in wood with a straight or curved handle. Specimens of such early sickles have been found in Egypt, Switzerland and Spain, and they are not the only new tools which tillage brought in its wake. Corn was now ground with querns, or hand mills, consisting of two flat stones, one larger than the other, which were rubbed together.

A second momentous discovery of Neolithic man was the domestication of animals Again we can only guess how it came about. Our best clue depends upon three facts. One is that dogs and their nearest relatives are apt to hang around the haunts of other hunting animals, among whom we may include primitive man. A second is that dogs round up gregarious ungulates, sheep or cattle, when they come across them. The third is that the association of man and the dog antedates any other form of human association Apart from the evidence provided by cave-paintings, we have other data which justify the last conclusion. The association of man and dog is universal. Man and dog turn up in Greenland, where there are no domesticated mammals, *sensu stricto*. Man and dog (*dingo*) turn up in Australia, where there are no placental mammals, other than those white men have brought. Man and dog were in New Zealand, which had no indigenous mammal when Europeans first visited it. So we may safely conclude that the dog blundered into an ecological association with man, and that man and dog together blundered into the ecological association which was the beginning of herdsmanship. The beginning was less a discovery than the outcome of a series of unpremeditated and fortuitous events, and it had unforeseen consequences. Having started herding and tillage, Neolithic man was groping towards a more intimate understanding of the rhythm of things; mating and lambing, sowing and reaping, sunshine and darkness, the warm seasons and the cold. Tillage and herding compelled man to observe nature more closely. Out of closer observation was born the calendar.

From the shores of the Mediterranean, where the new age was born, Neolithic people gradually spread over Europe. Somewhere about 10,000 B.C. they settled in Britain. Meantime vast geological and climatic factors were re-shaping the shores of Europe as we know them to-day. An opening between Spain and Africa joined the Mediterranean to the Atlantic. Gradual submergence of land between England and the Continent produced the North Sea and an insular Britain. Meanwhile the climate of Europe was becoming warmer. Forests were beginning to cover the vast wastes of the steppes.

There are no written records of this great age of pre-history, but other evidence man has left behind him show that he was taking the first steps towards leading a settled life.

In different parts of Britain and of Europe, beehive huts, lake dwellings, and pit dwellings bear witness to this change, and in some parts of England there are relics of primitive cultivation. In Devon and in Cornwall there are still remains of semi-nomadic settlements with rude huts and irregular patches of cultivated land surrounded by low walls. The small cultivated patches were little more than gardens of irregular shape. The implement used for tilling them was a stick with a curved end or simply a deer's antler. There were no furrows.

THE EVOLUTION OF THE PLOUGHED FIELDS

Such was the beginning of tillage The story of how these patches, scratched by such primitive tools, became fields belongs to the written record of history itself. Whether Neolithic man invented the foot plough or whether its discovery belongs to the Celts who came to this island in two great waves about 600 B C. and 400 B.C is uncertain. What is definitely known is that the Celts used a sort of foot plough, of which there are survivals in the Scottish Highlands to-day. This foot plough consisted of a curved handle set into a straight foot piece, with an iron joint. Unlike that of the digging stick or deer's antler, its use was not haphazard. It could be used to dig straight lines through the soil (Fig 1).

The early settler turned the clods with this cumbersome tool, taking a backward step to dig it into the soil again, heaping it with a dexterous turn of the wrist. In short, he was making the first furrow. In remote parts of the Highlands to-day, crofters still use a primitive instrument of this sort. They call it a *caschrom*, and drive the furrow without aid of horses or oxen. The survival of this ancient instrument, which was in general use in the Highlands of Scotland during the eighteenth century, is perhaps due to the rocky nature of the land, and hence to the difficulty of using a team of oxen or horses. Whatever the reason may be, the caschrom is a ploughing instrument whose history takes one back at least to the early iron age, about 400 B.C There is evidence of the use of foot ploughs in Brittany, Somerset, Wales, Ireland and Scotland.

Since the use of the foot plough produced furrows, it encouraged cultivation of larger fields than the little patches surrounding the beehive dwellings of Neolithic man. Some animals were now domesticated, and the process of cultivation took a new turn The ox came into use as a draught animal, and the foot plough took a new shape. The old Breton plough closely resembles the foot plough plus a beam and coulter Even the wooden peg, as Dr. Curwen points out, is still there, though now a little higher up the shaft. It provides grip for the hand instead of for the foot

Displacement of the foot by the ox plough must have been a very slow process. Doubtless the two implements were used side by side for many centuries. Whichever was used, the result was the same. Field cultivation took the place of plot cultivation, and land was ploughed in furrows. Such early ploughs merely scratched the surface. They had no proper ploughshare

to undercut and turn over the sod. So it was customary to plough the fields first from north to south, then from east to west. The result was a squarish, or at least a rectangular, field.

In Roman times there was another great advance, which also changed the appearance of the field. Throughout the Roman Empire the two-oxen plough or the foot plough were still in general use, but Pliny tells us of a new and improved plough with wheels and a broad ploughshare. They used it in Rhaetia, a district in eastern Switzerland. It required a team of four or six oxen. Since it was muc . more effective than the old one, criss-cross ploughing was no longer neces y Long furrows now took the place of short ones. The cultivated field came to be cut up into a number of long narrow strips or ridges.

The nature of these strips as well as their size was determined by the manner of ploughing. A furrow length or *furlong* was probably the distance the team of oxen could plough without a pause. In course of time it came to be fixed at 220 yards. Since it was the practice to plough inwards from the two edges, there was a tendency for the middle of the strip to be higher than the outer edges. Between the strips the tiller left a double furrow which served as a ditch For many centuries this ditch was the only method of agricultural drainage In the course of time it got covered with weeds and was a convenient dumping place for stones and rubbish.

Both the size of the cultivated strip and its character are connected with the method of ploughing, and they have left their mark on our system of measurement. The area of a single unit was an acre, the length a furlong, and the breadth 4 rods or 22 yards. The measuring rod itself was the stick used to goad the oxen, and it was generally 5½ yards long. Since there were many natural obstacles, such as boulders, trees, and marshy places, the strips did not lie uniformly side by side, but usually at sixes and sevens.

It is improbable that the Romans introduced this new plough into Britain. The Celts were a hill folk. We may be sure that they continued to use their foot ploughs or two-oxen ploughs, tilling their squarish fields high up on the hillside. Where the Romans established their villas or slave estates, with large home farms and individual holdings of *coloni*, the method of tillage was, probably the same. Probably the eight-oxen plough came to us from Germany when England fell a prey to successive invasions of Teutonic tribes after the withdrawal of the Romans from Britain. For more than two centuries native Celts fought the invaders, and those not captured were driven westwards.

While the Celts remained unconquered in Wales, Scotland and Ireland, the east and midlands of England passed into the hands of the Anglo-Saxons. These bands of Germanic peoples brought with them their own tribal habits. Their social unit was the village inhabited by a number of blood relations or separate families, tilling their fields and rearing their livestock on the common or waste lands. The probability is that they introduced into England the typical long strip cultivation of medieval times. They were valley folk So they settled on lands which Celtic peoples had shunned. There was little, if any, continuity between the Celtic method of cultivation and the English or Anglo-Saxon.

Of recent years several investigators have brought air-photography to the aid of history; and have shown this in a striking way. The possibilities of air-photography were demonstrated in the First World War (1914-18) and archæologists were not slow to see how valuable such photographs might be for the study of economic history One of the pioneers was Mr. O. G. S. Crawford, whose photographs and writings have thrown a flood of light on the evolution of cultivation. He tells us:

"The most remarkable discoveries which have been made are due to plants, which are sensitive to slight differences of soil and moisture. For example, if a ditch has been dug on a chalk down and the down has afterwards been ploughed flat and sown with corn, for ever afterwards the subsoil filling (or silt) of that ditch differs from the adjacent never-disturbed soil. Nothing can restore chalk once dug to its former state of compactness. Archæologists have long known this, for one of the principal needs in excavation is to distinguish between disturbed and undisturbed soil But one cannot dig up a whole field or several fields to find a ditch which after all may not exist. Here it is that a vertical view helps, for the effect of this moister silt upon a crop of corn is to promote its growth and deepen its colour Thus from above one sees and can photograph a belt of darker green corn following the line of the vanished ditch These lines are sometimes visible on the ground, from across a valley, or even at closer quarters. Sometimes (as in parts of the Stonehenge Avenue) they are quite invisible. But always, when more than a single ditch is concerned, the air view is necessary to convert chaos into order "*

So we now have photographs of the ancient Celtic fields, as of the English acre strips introduced by the Anglo-Saxons more than 1000 years ago The best illustrations come from hilly ground. The ancient way was to plough *along* the hillside, not up and down the slope The effect was to loosen the soil. Since ploughing was done in strips there was a tendency for the soil to slip under the influence of rain and gravitation towards the outer edge of the strip. In course of time strips became terraces, and divisions between them became steep banks. Many remains of terraces left by the Celtic hill folk can be seen in the north and south-east of England, as also in certain places in the Lowlands of Scotland

In the illustration (Fig 2) of prehistoric Celtic fields near Eastbourne in Sussex, we can see broad rectangular strips Celtic terraces have also been found in the Lowlands of Scotland, the best known at Dunsappie on Arthur's Seat, near Edinburgh, another at Torwoodlee, near Galashiels. Though the Anglo-Saxons were valley people their cultivation necessarily encroached on the hillside, where we find again familiar terraces or lynchets, but they are much longer and narrower than those of the Celts, because the Anglo-Saxons used the new plough drawn by six or eight oxen. Our illustration (Fig 4) of early English cultivation at Dorset shows the long, narrow strips which were so typical of English medieval farming.

THE TWO- OR THREE-FIELD SYSTEM

As people threw off the nomadic habit and settled down to till the land, they were forced to recognize one thing every farmer and amateur gardener

* *Wessex from the Air*, by O. G S Crawford and A Keiller Oxford, 1928

knows. The same piece of land cannot be used year after year without impoverishing the soil. Nowadays we know enough about plant life to know why this is so. We are familiar with rotation of leguminous and cereal crops and the use of fertilizers. We can keep soil in good condition. In early, and even in medieval, times nothing was known about crop rotation or fertilizers. People therefore adopted the most obvious device for dealing with the difficulty. They let the land rest at regular intervals.

For this purpose the arable land of village or farm was divided into two (*two-field system*) or three (*three-field system*) great fields. In the two-field system, one of the fields was left fallow each year. The other bore its crop of oats, barley or wheat. In the three-field system, each field was rested every third year. One might think that the superiority of the three-field over the two-field system would have led to its general adoption, but this was not so. What system a locality adopted depended on geographical considerations. Other things being equal, the three-field system gradually displaced the two-field, but in farming other things are never equal. So hilly and infertile districts often clung to the two-field system down to the eighteenth century after more fertile lowlands had adopted the three-field system.

Generally speaking, the two- or three-field system prevailed in the Midlands of England from the Isle of Wight to Yorkshire; but in this area there were many modifications of it. Sometimes there was four-field rotation; or again part of the village lands might be two-field one year and three-field next year. Where conditions suited, the general tendency favoured three-field cultivation. In Scotland, and in some parts of England, an entirely different system known as the *infield and outfield system* prevailed. Scotland never came under Roman government, and, except in the Lothians, was untouched by Anglo-Saxon invasion. Thus unaffected by circumstances which powerfully moulded English history, the north of Britain pursued an independent social and economic development. Geographical accidents also took a hand in shaping Scotland's economic life North of the Forth and Clyde there is an extensive mountain region. In the southern Lowlands there is hilly country. Between them there is the midland plain which has become the chief centre of Scottish industry. The mountainous nature of Scotland has made a considerable part of her soil, estimated to-day at about three-quarters, unfit for the plough.

The prevalent method of farming in Scotland was to divide arable land into two broad divisions, treated differently. How early this system existed is uncertain, but it was widespread from the Middle Ages to the eighteenth century. The land nearest the houses of the cultivators was called the *infield*. It was not, of course, a single compact field, but really consisted of many small and irregular patches unenclosed by stone wall or hedge. With so many natural obstacles, like boulders, marshy ground, whins, etc., a regular field was out of the question. A glance at the accompanying plan (Fig. 4) of a township or joint farm in the parish of Monymusk, Aberdeenshire, in 17[illegible]4 will make this clear. The crops raised were oats and bere (a coarse kind of barley), and these were grown year after year without rest for the soil, which received all the *manure of the farmyard*. This was a form of intensive cultivation. There was no fallow, and no rotation of crops.

In general, the *outfield* was by far the larger of the two. The land was poorer, and it was treated in a different way. Our map (Fig. 4) shows that it consisted of various patches of land. A part was ploughed up from grass and planted with oats or barley each year. Thereafter it continued to grow these crops until so exhausted that a crop was hardly worth cutting. Under this system a piece of land might be continuously cropped for 6, 8 or 10 years, then abandoned to nature. After a rest for four or five years, it was once more ploughed up, and got the same treatment again. Meantime, another part of the outfield was taken in from grass each year to follow the same routine. The only manure it got was the droppings of cattle which grazed over the land before ploughing. It did not always get that.

The infield-outfield system has been referred to as "the Celtic system" (Gray, *English Field Systems*, 1915). It is doubtful if the epithet is justified. The system was not peculiar to Celtic people. It was dominant in Scotland, but Clapham has shown that variations of it existed all down the west side of England and in Wales. There were many survivals as late as 1800. It is also known in the East Riding of Yorkshire, in West Nottinghamshire, and in the Breckland of south-west Norfolk. In their article, "The Infield-Outfield System in a Norfolk Manor" (*Econ. Hist.*, 1935), Saltmarsh and Darby show the existence of infield and outfield in 1612, and they point to a significant correlation between these types of arable lands and the surface geology of the area They say that the settlement and most of the infield "lay in the south eastern part of the manor, in the centre of a ring of meres; open river-gravel, loam and an outcrop of water-bearing chalk—an oasis in this region of arid sands. . . . The outfield lay north and west of the infield, partly on an isolated outcrop of chalk, but mainly upon boulder clay and sandy gravel."

The infield and outfield system existed on the Continent—in Celtic Brittany, in Maine, in the Ardennes plateau, in the High Vosges, in the Jura, in areas of the Alps and Pyrenees. Mr. Gordon East (*An Historical Geography of Europe*, 1935, 104) says.

> "What seems much more fundamental than its apparent association with the Celts is its correlation with a certain type of country: upland country, characterized by heavy rainfall, by abundant natural wood and pasture land, by relative scarcity of plain and arable soils, and by the dispersion of hamlets and homesteads. . . The poorness of the soils in these regions, together with their wetness and exposure, the extent of forest cover and even boggy tracts—supply a set of geographical factors which may well explain the distribution of a common agricultural system."

The infield and outfield system has characteristics which point to a primitive level of agricultural knowledge. The continuous cropping of the infield must have seemed the obvious thing to do, provided utter exhaustion of the soil could be prevented. On the hillside where land was plentiful, though studded with boulders, whins and heather, nothing would be more natural than to plough a few acres, exhaust them, and move on to a fresh place. Oddly enough, this system remained general in every county of Scotland till the eighteenth, indeed locally till the nineteenth, century.

FOLK OF THE FURROW

So far we have been concerned with the lay-out of the land and with methods of cultivation. It is now time to say more about the people who lived on it. Let us first consider the English. In medieval England there was no *typical* village. More and more, as modern research excavates the dark places of the past, we realize the bewildering variety of agrarian life In the south and in the midland belt, stretching from the English Channel to Yorkshire, there were manorial estates in which the large nucleated village predominated. In the hilly parts, such as the Welsh border or Yorkshire where pasture farming was important, scattered hamlets were common. Away in the south-east, country life bore recognizable traces of the Roman Occupation.

The most important class of tenant of the manorial estate was the *villein.* Since the lord of the manor depended on his labour services for the cultivation of his demesne, the villein's was a key position in the organization of the manor. Services required of him were generally twofold, *week* work, i e. two or three days work each week, and *boon* work at the busy times of harvest and ploughing. Usually the villein had to make fixed payments in kind, fowls at Christmas, eggs at Easter, and so on Lower in the social scale were *cotters,* who had smaller holdings and rendered correspondingly smaller services. Both villein and cotter were serfs. They could not leave the manor without the lord's consent. On the marriage of a daughter they had to pay to the lord of the manor a tax called *merchet,* regarded as the most degrading and most certain mark of serfdom. Without his consent, a villein's son could not enter the Church or become apprentice to an urban craft.

Conditions varied from manor to manor. On some manors serf, on others *wage,* labour predominated. Sometimes the majority of tenants were cotters with very small holdings. While there was such variety of practice within the manorial system, there were also considerable areas where neither serfdom nor demesne farming by forced labour existed in southern and midland England. In an investigation into part of the midlands in 1279, Kosminsky shows that 60 per cent of the territory was made up of typical manors with demesne farming and villein holdings, but the remaining 40 per cent was non-manorial. It consisted chiefly of freeholds.

This diversity of the economic and social arrangements of village life, in the lay-out of the fields and in the crops raised, may have coexisted with uniformity of other features of the land system. In general, individual holdings of land were made up of strips scattered here and there throughout the arable ground. The origin of this distribution, which remained general until the eighteenth century, has been much disputed. Some argue that it was an attempt to share alike the benefits and disabilities of good and bad land; but a recent writer has pointed out that this presupposes feats of surveying beyond the capacity of agriculturalists in the Middle Ages. Others say intermixed holdings have their origin in a co-operative system of ploughing.

When the plough-team consisted of eight oxen, tenants had to co-operate. A sufficient reason was that one tenant would seldom have sufficient oxen for such a large team. With their common plough and common plough-team, the villagers would plough each strip as they came to it, and each man in

turn would be allotted one. When the whole field was ploughed, any one tenant would therefore find that he had strips in different places. According to an ancient law, such a method was practised in Wales; and it would naturally result in a complicated intermixture of holdings. This implies that reallotment took place annually at one time. By the twelfth century [illegible] tenants and freemen alike generally retained their holdings indefinitely, but annual reallotment of meadow land continued.

From early times until the eighteenth, and in some cases until the nineteenth century the holding of intermixed strips was a very striking feature of cultivation. Generally the villein held between thirty and forty acres, and the cotter about five. As a result of transference or sale, the size of holdings came to differ very widely. For the same reason the acre strips themselves were liable to change. They were cut up into ribbons of half- or quarter acres. Besides holding strips in the arable fields and in the meadow land, each tenant had rights to the *common* and waste land. In fact, the commons were an indispensable part of village life. They provided grazing for their cows and sheep, wood for their fires, rushes for thatching and making baskets, and a place where pigs and poultry could range at large.

One feature of arable fields in medieval farming emphasizes the communal tradition of the village and has an important bearing on the social history of the countryside (see pp. 33, 41). They were *enclosed* only when the crops were growing. After harvest, temporary barriers put up to keep the cattle from straying among the crops came down. So all the land was open and common. This practice is called the *Open-Field System*, in contrast to the modern *Enclosure System* of fields permanently separated by stone wall or hedge.

Rig (or strip) cultivation and intermixed holdings known as *run rig* were also general in Scotland. It was the common system as late as the eighteenth century. "The land," says a Report on the Agriculture of Perth, 1794, "is like a piece of striped cloth with banks full of weeds and ridges of corn in constant succession from one end of the field to the other . . . even so late as thirty or forty years ago, this practice prevailed, not only over the great part of the county of Perth, but with very few exceptions over all Scotland." In 1815 the run rig system was practised in Arran. No one had the same rig for two years in succession—except after the potato crop. About 1810 a tenant's holding in some parts of Argyll and Inverness-shire still consisted of scattered strips. Even as late as 1880, North Uist knew no other system, and the rigs were allotted annually. The plan (Fig. 4) of the lands of a township in Aberdeenshire in 1774 shows evidence of the run rig system, though some consolidation of strips had already taken place.

The manorial village, so common in the midlands of England, was not found in Scotland. A Scottish estate or *barony*, as it was called, consisted of a central demesne or home farm, and a number of townships scattered through the estate. These townships or "touns" were not villages. They were simply clusters of houses where a few tenants and sub-tenants lived. According to a Rental of 1290, the monks kept certain granges or home farms on the lands of Kelso Abbey in Tweeddale in their own hands. There they employed the services of small cottagers, who held from 1 to 3 acres each, and possibly some serfs. Beyond the granges, the land was let to

husbandmen who lived in small hamlets and cultivated their lands co-operatively. They had to render certain services, e.g. carting, ploughing and reaping, besides making money payments for their land. Similar arrangements sometimes existed on royal estates. In the Highlands, the chiefs let estates to *tacksmen* (=*lease*-men), usually cadets of the family and close relations of the chief. The tacksmen let the various scattered townships to tenants who frequently had sub-tenants or *cotters* under them

The typical Scottish township or *toun* was small. Originally, there was some connexion between its area and the size of the plough-team. Outside the Highlands the common land measurements were the *oxgate*, the *husband-land* and the *ploughgate*. The oxgate was the land held by the owner of one ox, and was equal to 13 acres. Eight of these holdings made up a ploughgate, the amount of land that could be served by one plough and its team of eight oxen. The husbandland consisted of two oxgates, and four husbandmen living in the same toun provided the team for the common plough. This was the system on the lands of Kelso Abbey in 1296. In the Forbes Rent Roll of 1552 (Aberdeenshire) most of the farms or touns consisted of "ane pleuche" and were let to four tenants, each of whom held "tua oxingang" or oxgates. In the Gordon Rent Roll of 1600 (comprising estates stretching from Aberdeenshire to Lochaber in Inverness-shire) there is great uniformity. "Tua pleuches" are let for five years to three tenants, two of whom held four oxgates each, and the other eight oxgates; "ane pleuche" is let for five years to five men, three of whom held "tua oxingang" and the other two "ane oxingang."

In Lochaber and in most parts of the West Highlands, lands were measured in merklands and pennylands, but there, too, as Miss I. F. Grant points out, there was a connexion between the size of the holding and the plough team. Sometimes the tenants held joint leases, at other times individual ones, but always they co-operated in ploughing. Generally they had a number of sub-tenants who held their small patches of land from year to year, and who had to remove with the principal tenant.

Serfdom, probably common throughout the early Middle Ages, appears to have disappeared early in Scotland. Kelso Abbey had serfs. In 1170 Earl Waldev of Dunbar

"granted and confirmed to the abbot and monks of Kelso, Halden and his brother William and all their children and all their descendants" (*Liber de Calchou*, 98).

By about 1300, serfdom was rapidly disappearing in Scotland. The last recorded case of a claim against a serf occurred in 1346. With the disappearance of serfdom, agricultural tenancies came to be of three main types: (*a*) *kindly tenants* whose title to land depended on custom and on the goodwill of the lord; (*b*) *leaseholders*, and (*c*) *tenants-at-will*. The first type generally disappeared in the sixteenth century when unscrupulous landowners evicted or transformed them into leaseholders. They suffered like the English *copy-holders* (see pp. 32–3), who also had no satisfactory written title to their land. The second class of leaseholders tended to grow, but possibly the majority of people remained tenants-at-will down to the eighteenth century.

In many parts of Scotland cattle-raising was more important than tillage. Besides pasture lands near the township, there was often extensive hill and moor grazing, several miles away, to which the villagers migrated in summer time. Early in May they would set off with their cattle for the *shealings*, as these distant grazings were called, where they would remain for several months. They took with them churns, spinning wheels, and countless other things. Only a mere skeleton team stayed behind to look after the crops. When August came they returned home ready to take part in the harvest. Shealings were very common in the Highlands, and were not unknown in the Lowlands. The custom of taking the herds away to hill pasture still goes on in Switzerland and Norway.

BEGINNINGS OF CAPITALIST FARMING

The great open fields of England, and the infield and outfield lands of Scotland, bore their crops of wheat, oats, barley and pease, the food and drink of the people, till the end of the Middle Ages Everywhere there was this intimate connexion between the people's work and their daily bread In the manor house the lord might season his food with rich spices from abroad or supplement his home-brewed ale with French wine. In his cottage the peasant contented himself with the produce of his own strips and rigs. This state of affairs was not destined to last. Below the placid and apparently static life of the countryside, new forces were at work. Gradually, and almost imperceptibly, a new type of society was unfolding The new forces at work were the rise of a money economy, the growth of towns, and the demands of commerce.

Indeed, the medieval village was seldom entirely self-sufficing. The purchase of salt and tar, iron for the ploughshare, knives and other tools, represented an unavoidable minimum of exchange between one place and another. Besides, grain was sometimes moved from outlying manors to central ones, as in the Bishopric of Winchester where corn was sent from the out-manors to the Palace. Even between the manors there was movement. As town life developed in the centuries following the Norman Conquest, countless little urban markets began to draw food from the surrounding countryside in exchange for products of craftsmen.

Increasing use of money as a medium of exchange for such transactions itself stimulated trade, and money has been called a great solvent It tends to break up relationships based on tradition and custom. The lord or small farmer who was able to sell his produce in the growing towns had possibilities of a more varied life before him, and the servile class naturally chafed under a system of labour dues which obstructed participation in trade. Before 1300, *commutation* of agricultural services for money rents had already begun.

The movement was very irregular Though lords with a superfluity of serf labour commuted willingly, others not so fortunate clung to serf labour, demanding greater services from their tenants. "It is, on the whole, true," says Kosminsky, "that the prevailing tendency in the English village at this period was the growth of money rents, which, as early as the thirteenth century, had become the chief form of feudal rent, but side by side with them

the labour services remained and in places even grew." For a period lords tried to check commutation because of the great scarcity of labour. Otherwise, the conversion of services into money rents proceeded rapidly during the fourteenth century, and more especially after the Black Death in 1349–51. The villein who had exchanged payment by service for payment in coin became a *copyholder*.

Transition from forced services to money rents, and spread of a money economy, coincided with expansion of trade and industry in the town. Together they stimulated *capitalist farming*. Under *subsistence farming*, people grew the kinds and quantities of food which their own needs demanded. Under capitalism, the use to which land is put depends on the possibilities of the market. Rapidly rising prices of the hundred years ending with the second half of the fourteenth century stimulated the rise of commercialism in the countryside. Before 1300 some tenants were trying to arrange their scattered strips into consolidated holdings. Some were adding to their holdings by purchase. The margin of cultivation was receding as new lands came under the plough. Landlord and tenant alike nibbled at the commons. Thus the manorial court had become a busy land-market. A class of dealers called *cornmongers* specialized in the marketing of corn. From the thirteenth century, England gradually came to be divided into local or regional markets. The Lower Thames or London market consisted of land within twenty-five miles radius of London, the Norwich market included most of Norfolk, and so on.

On the whole, the countryside moved slowly. In some places one generation succeeded another without any perceptible change in the method of cultivation, lay-out of fields, or mode of living. Sowing gave place to reaping, reaping to sowing, and men trod in the footsteps of their fathers, cherishing their customs and traditions as something changeless as the seasons themselves. So many landlords could contemplate the changeless countryside with equanimity. Over a large part of England the open-field system, the commons and waste lands, the intermixed holdings, and in many places relics of the manorial organization, survived into the eighteenth century.

About 1400 there was a check to rising prices. For about a century the tendency was on the whole downwards. While there was little change in methods of organization in the greater part of the country, commercialization of agriculture, encouraged by an infiltration of successful business men, was going on steadily. Before the close of the fifteenth century prosperity of the native woollen industry and demands of the cloth manufacture of Flanders were making it profitable to create large sheep farms. The great *enclosure movement*, well under way by 1500, swept over the Midlands and eastern counties from Berkshire and Oxfordshire in the south to Lincoln and Norfolk in the north-east. It was a social revolution of the first magnitude. Holdings were thrown together, commons were enclosed, and tenants, whose legal position was not too clear, were evicted (Fig. 5). Tudor Government feverishly tried to check a movement which was having such grave social repercussions, but the task was too great. Landlords broke the law more often than tenants, and great tracts of land turned from tillage to sheep farming.



FIG. 1. SKYE CROFTER USING THE CASCHROM

(Air Photography and Economic History by permission of Mr E. Cecil Curwen and the Economic History Society.)

The Caschrom or foot plough is a very ancient implement of farming, most likely preceding the ox-drawn plough. This takes one back a long way in history, possibly to the Early Iron Age. This implement is still in use in some parts of Skye, Ross-shire and the Long Island. Its survival there is possibly due to its usefulness in rough and uneven land and to the long isolation of those parts of Scotland from the main stream of economic change.
(See p. 23)



FIG 2. PREHISTORIC CELTIC FIELDS, WINDOVER HILL, NEAR EASTBOURNE, SUSSEX.

This picture, reproduced by permission of the Controller of His Majesty's Stationery Office and of the Director General, Ordnance Survey, shows the use of a new tool for research in economic history Aerial photography releases new evidence of early farming methods The broad strips—almost rectangular in shape at the top right-hand corner—indicate methods of cultivation antedating the Roman invasion The testimony of such photographs must be checked by archæological investigation Otherwise markings due to such agencies as the grazing of cattle may assume a significance which is spurious

(See p 25)

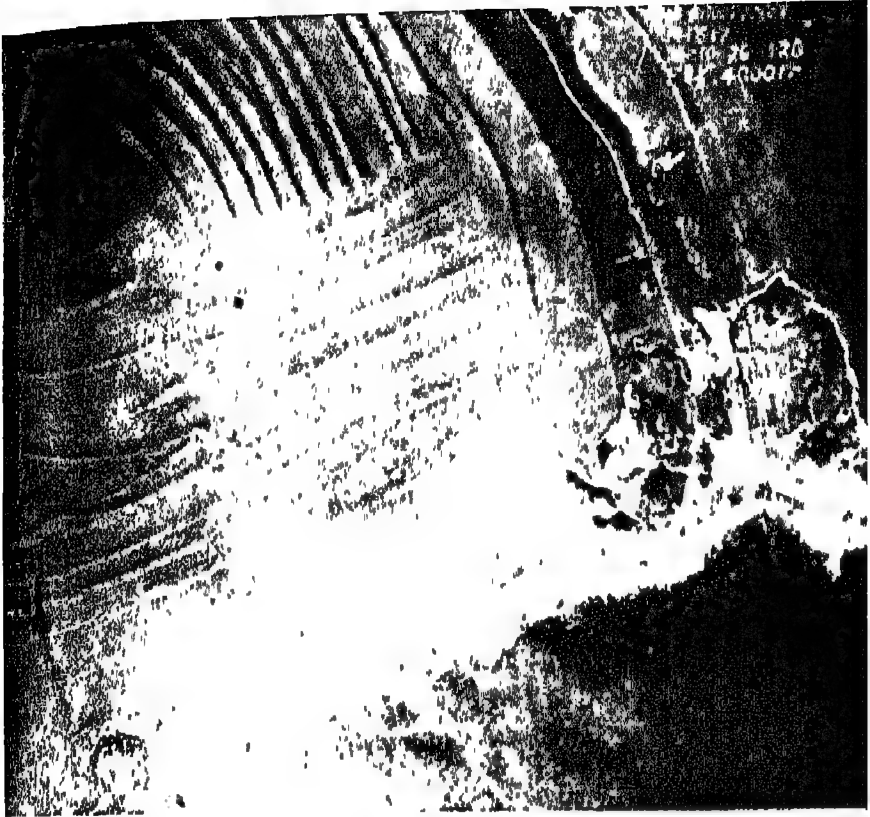


FIG 3. ENGLISH STRIP LYNCHETS, WINSPIT BOTTOM, NEAR WORTH MATRAVERS, PURBECK, DORSET

(*Crown copyright reserved*)

An aerial photograph, reproduced by permission of the Controller of His Majesty's Stationery Office and the Director General, Ordnance Survey, here shows the long narrow strips of early English cultivation. When ploughing takes place along sloping ground, the soil tends to creep downhill, accumulating along the lower edge of the strip. In time the surface becomes terraced with steep banks instead of baulks of unploughed land found between strips on level ground. Such terraces are known as *lynches* or *lynchets*.

(See p. 25)

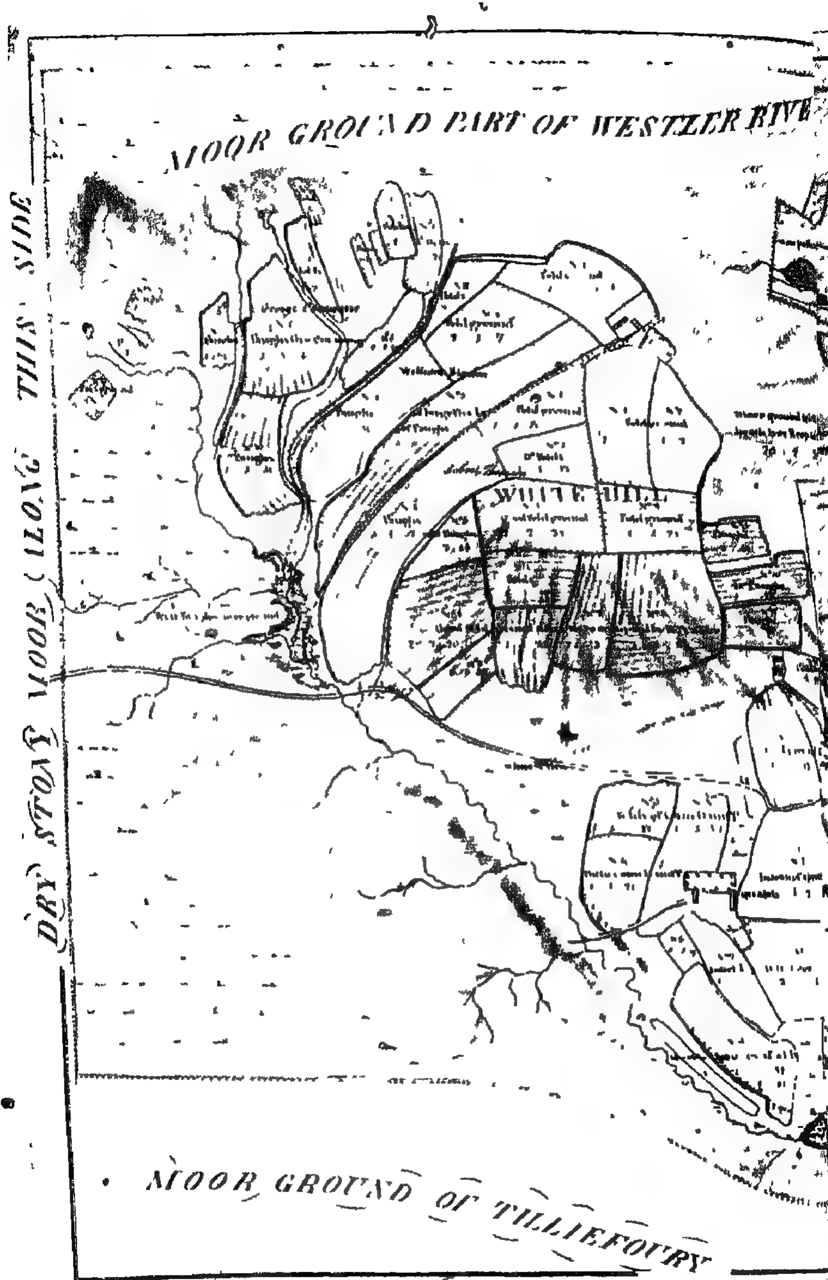


FIG 4 FARM OF TODLACHIE

(*By permission of* Si

The farm or *toun* of Todlachie is typical of the Scottish countryside before th
different, it is from the farm of to-day The cluster of houses is the *toun*, while th
simply ignored, hence irregularity of fields Natural obstacles were accepted a
greater extent, was further away One can notice the beginning

PART OF THE FARM OF PITMUNIE

NEW FOLDS

TODLACHIE

ABERDEENSHIRE, 1774.

Francis Grant, Bart.)

agrarian revolution of the eighteenth century A glance at the map will show how cultivated land consists of irregular patches Boggy, wet or very stony land was permanent *Infield* was the best land, generally near the farm houses. Outfield, of of improved cultivation at Newfolds (*top right hand corner*)

(See p 26)

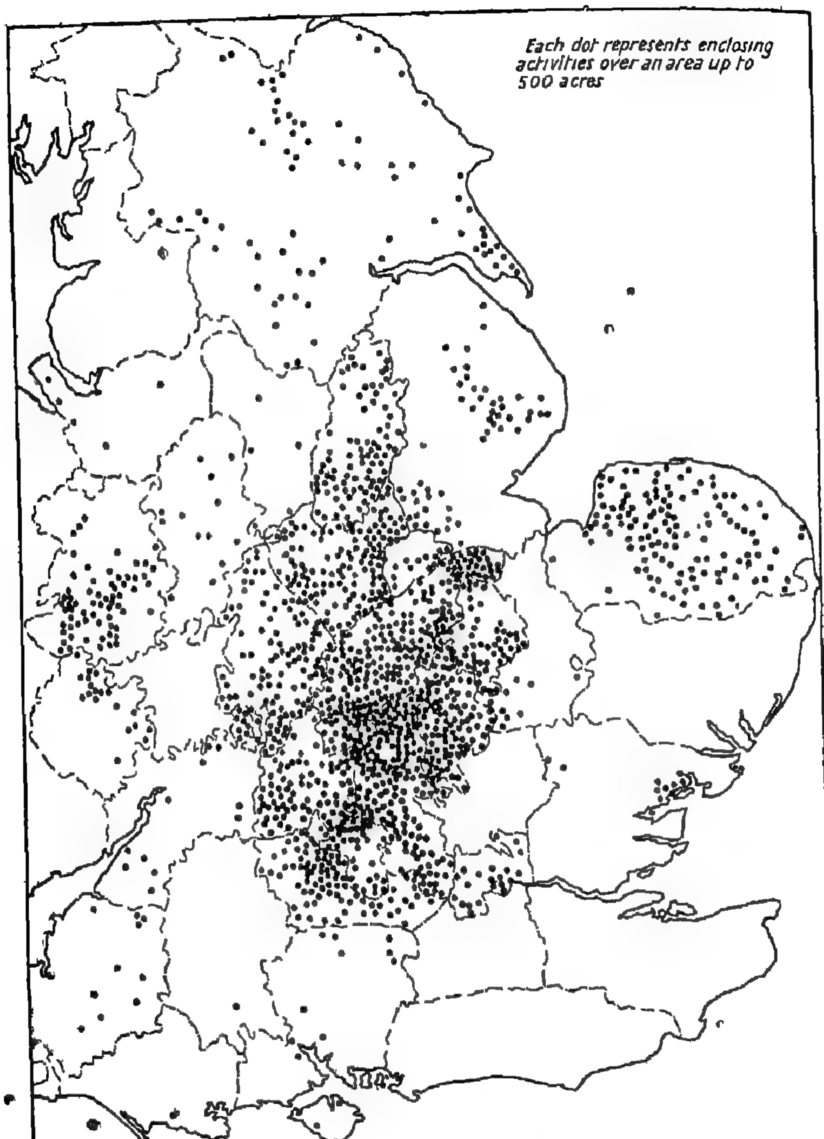


FIG 5 ENCLOSURE IN ENGLAND, 1485–1607

(*Adapted from E F Gay's map*, Quarterly Journal of Economics, xvii, *in Black*, The Reign of Elizabeth, *by permission of the Clarendon Press, Oxford*)

This map shows the area of England most affected by enclosure in the sixteenth century Few counties were unaffected About half a million acres or 2½ per cent of the whole area was involved, but gross statistics may be misleading A general average for the whole country would give little comfort to the copyholder in a Northamptonshire parish where most of the common lands had been enclosed (See p 32)

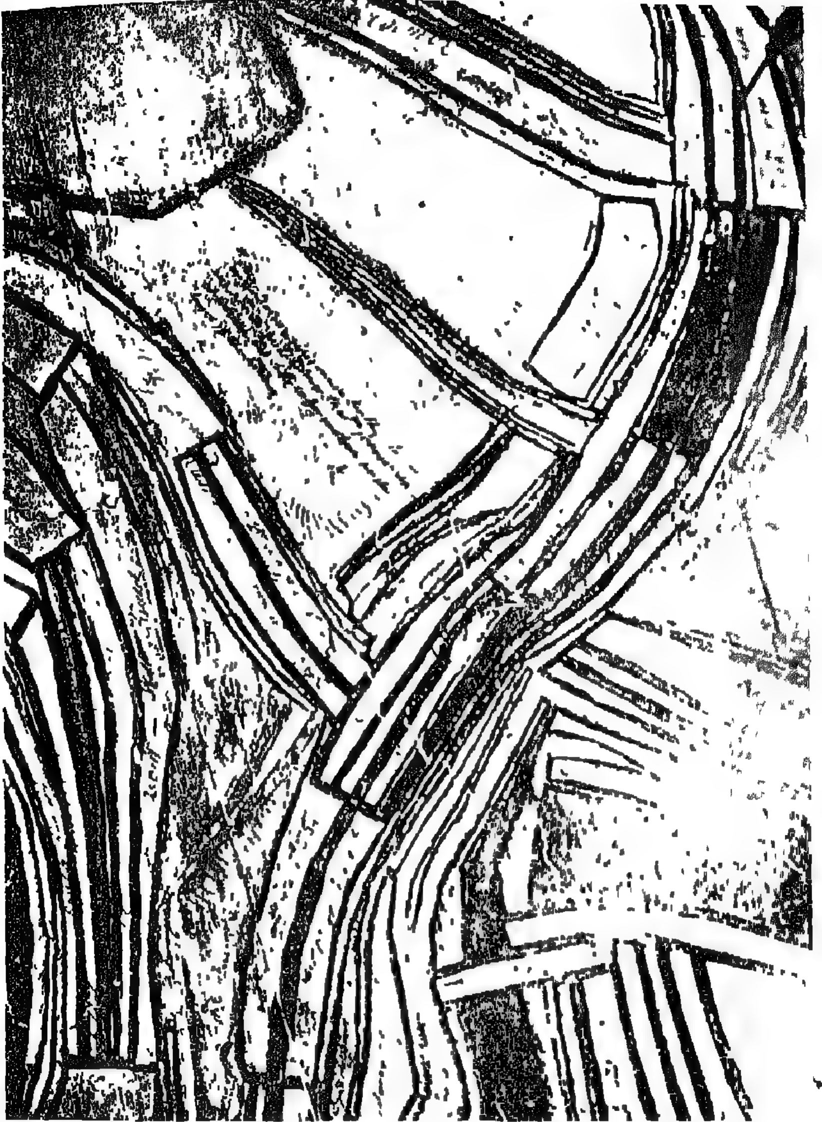


FIG 6 CALSTONE FIELDS, EIGHTEENTH CENTURY

(By permission of the Marquess of Lansdowne)

The extremely complicated layout of village lands in the early eighteenth century is evident in this plan of a Wiltshire parish Strips had been cut and clipped, divided and subdivided until a man's holding consisted of numerous parcels scattered amongst those of his neighbours. It was clearly a most inconvenient and inefficient farming system, and the problem of enclosure, that is of creating compact holdings, must have been an extremely tricky business *Much* hardship resulted from the division in favour of the chief landowners

(See p 12)

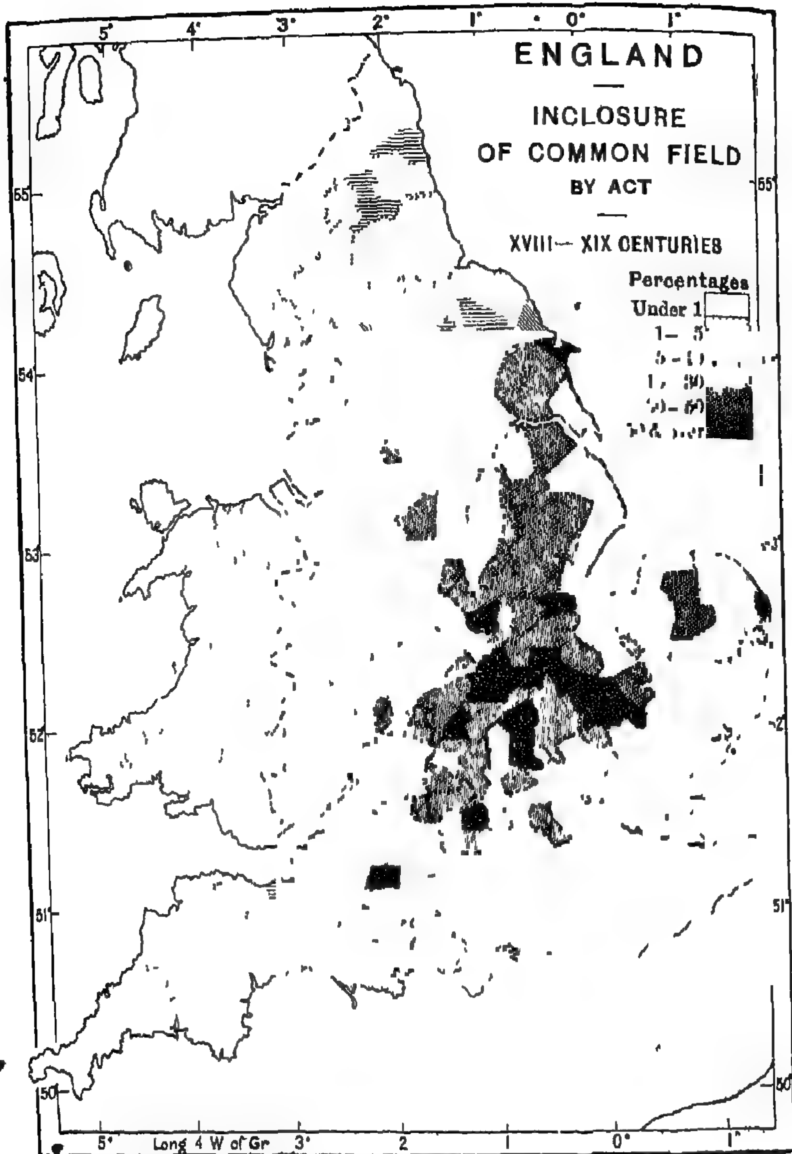


FIG 7. MAP OF ENCLOSURES IN ENGLAND, 1700–1870

(*Gonner*, Common Land and Enclosure, *by permission of Macmillan & Co*)

Compare this with Fig 5 Here we see the final stage in the abolition of the open field system Enclosure had been going on for a long time, but the eighteenth century drive for food accelerated the process until it became virtually an agrarian revolution By 1830 the modern countryside with enclosed fields and compact farms had been practically established

(See p 13)

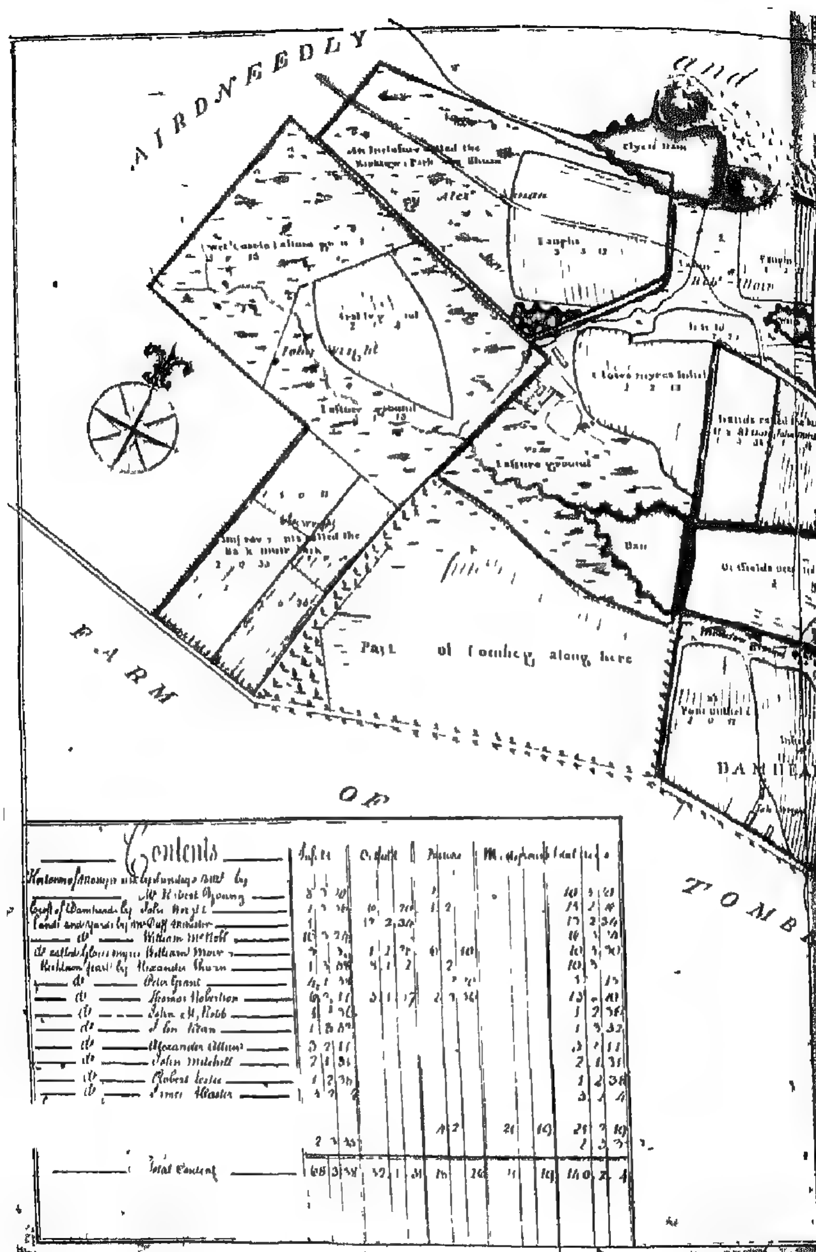


FIG 8 KIRKTOWN OF MONYMUSK,

(*By permission of Sir*

This is a plan of the lands of the main village of the parish of Monymusk,
heritor (landowner) there was a meal mill, a lint mill, a saw mill and a bleach-
consolidation of rigs William McRobb, for example, has now a compact
marshy land in the

KIRKTOWN

DAM HEAD

SANDYHILLOCK

KIRK TOWN

POLICIES

ABERDEENSHIRE, 1774

Francis Grant, Bart.)

Aberdeenshire, in 1774 Besides kirk and school and near by the House of the field Advance of farming methods is seen in the regularity of field and holding, consisting of 16 acres Notice the arable patches carved out of top left-hand corner

(See p 19)



FIG 9 FINE TEA, A MERCHANT'S TRADE CARD

(*Turberville,* Johnson's England, *by permission of The Clarendon Press, Oxford*)

The card here reproduced is that of a merchant with a flair for advertising It tells at a glance the nature and origin of the products he sold In the seventeenth and eighteenth centuries the Far East held a great fascination for Europeans, and the products brought from thence, like those here mentioned, worked a great social revolution in the Homeland At first very expensive, their use was mainly confined to middle and upper-class families, but the tea-drinking habit caught on quickly, encouraging social intercourse and polite conversation

(See p 72)



FIG 10 ACCUM LECTURING AT THE SURREY INSTITUTION

(*Drummond and Wilbraham*, The Englishman's Food, *by permission of Jonathan Cape*

Food supply for the teeming urban population of the industrial revolution raised difficult problems of preservation. This was an urgent matter because impure food or adulterated food was a menace to health Accum, the chemist, applied himself to the problem and drew public attention to the evils of food adulteration His audience at the Surrey Institution is spell-bound by his experiment

(See p 76)



FIG 11 THE COFFEE HOUSE POLITICIANS

(*Turberville,* Johnson's England, *by permission of The Clarendon Press, Oxford*)

In the eighteenth century the Coffee House was a unique institution Good coffee is more difficult to make than good tea So the specialist was easily able to attract customers to his House Acting as a mild stimulant, it loosened tongues At a time when news-sheets were few and expensive, the Coffee House served as a place of news, of gossip and of good conversation Those who frequented it became politically educated as they discussed current affairs over their cups of coffee, and passed their news-sheets from hand to hand

(See p 82)



FIG 12 RURAL MEDIEVAL COSTUME FROM THE LUTTRELL PSALTER

This illustrates the typical features of medieval dress absence of distinction between the sexes, the use of the skirt, turned-up shoes, straw leggings, girdle, and hood-like head gear Upper-class people wore better material and longer skirts, but styles did not differ greatly At the girdle hung usually a knife or leather pouch which served as a pocket



FIG 13 RUSTICS OF THE FOURTEENTH CENTURY

(*Strutt*, Dress and Habits of the People of England, 184[illegible])

The dress of the medieval rustic, home made from home produced materials, was designed to give protection from the weather, for these people spent most of their time working in the fields There was no place for rivalry or fashion Country folks were the last to be affected by new modes

(See p 92)



FIG. 14 DRESS OF THE SIXTEENTH AND SEVENTEENTH CENTURIES

(*Strutt*, Dress and Habits of the People of England, 1812)

The sixteenth century opens a new age in dress, distinguished for its new materials, its elegant cut and its elaborate ornamentation Here is evidence of rivalry, ostentation and wealth, and a consciousness of superiority, associated with the mighty social, economic and political changes of the times

(See p 91)

Sixteenth-century literature refers often to the social upheaval which accompanied the growth of capitalist farming. A ballad of the time runs:

"The towns go down, the land decays . . .
Great men maketh nowadays
A sheep cote in the church
Commons to close and keep;
Poor folk for bread cry and weep·
Towns pulled down to pasture sheep;
This is the new guise."

In a sermon preached before Edward VI, Latimer denounced the grasping landlords. "You landlords, you rent-raisers," he cries,

"I may say you step-lords, you unnatural lords: you have for your possessions yearly too much. For that here before went for twenty or forty pounds by year, (which is an honest portion to be had gratis in one lordship of another man's sweat and labour), now is let for fifty or an hundred pound by year. Of this 'too much' cometh this monstrous and portentous dearth made by man, notwithstanding God doth send us plentifully the fruits of the earth, mercifully, contrary unto our deserts notwithstanding, too much, which these rich men have causeth such dearth, that poor men, which live of their labour, cannot with the sweat of their face have a living, all kinds of victuals is so dear."

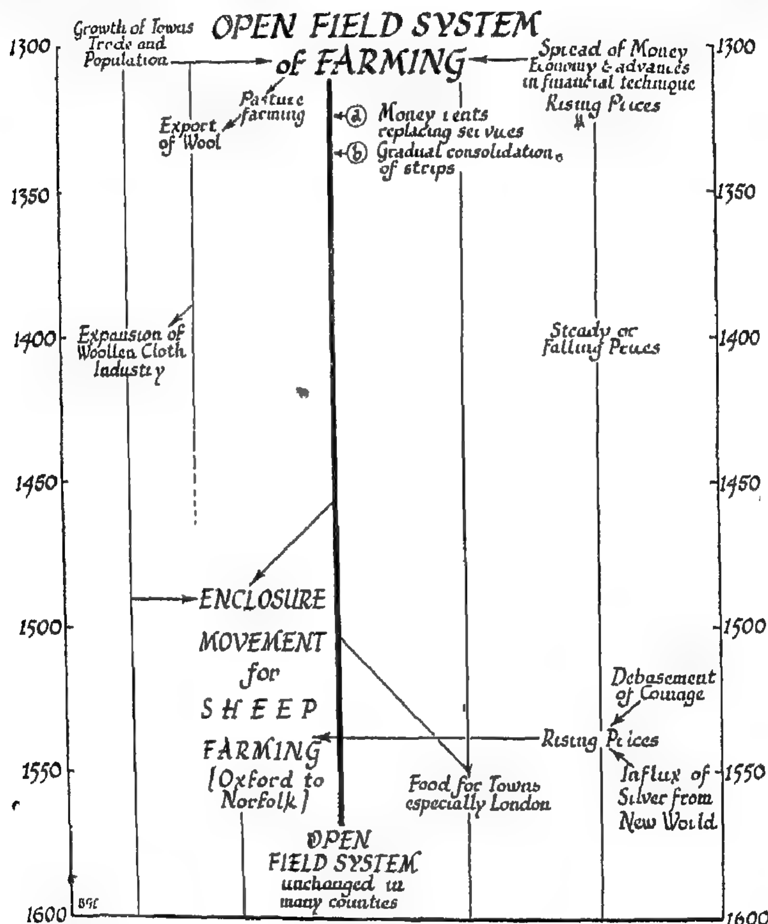
A rise in prices in the sixteenth century due to debasement of the coinage and to the great influx of silver from the New World gave another impulse to the movement. So long as prices remained stable, rents of copyholders, fixed by custom and recorded in the Court Rolls of the Manor, were doubtless good enough to satisfy the landlord. With solidly rising prices, their real value fell to a mere nothing. Faced with high prices on the one hand, and low returns from their estates on the other, landlords eagerly grasped at any method to make their estates pay Where possible, they revised existing contracts

This was not difficult when the title of the copyholder did not satisfy a lawyer Increased fines and payments were levied. Often the tenant, if unable to pay, had to get out. Then the landlord was free to let his land at whatever rent he could get. The woollen industry offered needy landlords an easy way of solving their difficulties. They could now rear sheep, at a large saving in labour costs, and sell wool to the rapidly expanding cloth industry. In the doing of it they trampled on ancient rights and brought great suffering to the small people of the land

Change in methods of food production was slow. While the rise of prices affected foodstuffs, and hence offered opportunities of profit to farmers and middlemen, it was much more difficult to alter methods of arable cultivation than to replace tillage by pasture. There were the intricacies of the open-field system, there was the conservatism of the farmer, and there were soil differences which made it impossible to apply one plan to the country as a whole. Besides, capitalist organization of the woollen industry had gone far by the first half of the sixteenth century. It was all too easy for a landlord to sell the wool, if he took to sheep farming. Commercial organization of food distribution had to precede any large-scale organization of production.

THE PRESSURE OF POPULATION

Till about the time of the accession of Elizabeth, London, like other important towns, had drawn its food supplies from its immediate vicinity. Kent supplied nearly 75 per cent Neither imports nor coast-wise trade was important, except in years of great scarcity. From the middle of the sixteenth century onwards, everything points to a phenomenal increase of London's



TIME CHART 1: FROM SUBSISTENCE TO PROFIT FARMING

population, trade and consumption The urge to improve arable farming in Britain first came from this expansion of London's population. London was forced to draw its food supplies from a wider and wider area Fisher tells us (*Econ Hist Rev.*, April 1935).

"Under the early Stuarts, north-east Kent was a vast granary for the city's service Both Norfolk and Essex were sources of regular, as well as of exceptional supplies. The Sussex grain trade rose from insignificance into some prominence. In times of dearth, both the north-east and the south-west coasts

made substantial contributions. . . . As the years pass it is possible to watch the city's tentacles spreading over the provinces until by the middle of the seventeenth century they reached to Berwick, Cornwall, and Wales "

Corn, meaning wheat, oats and barley, was not the only foodstuff brought from this wider area. Eggs and poultry came from Bedfordshire and Northamptonshire, sheep from as far away as Gloucestershire and Northampton, cattle from Wales, the north and west of England (and possibly Scotland); fruit, hops and vegetables from Kent, Essex, Suffolk and so on. This large market, which Professor Gras calls metropolitan, was a half-way house between the old local market and the not yet developed national market It gave scope to middlemen, wholesale merchants and retail shopkeepers. It stimulated the practice and study of agriculture. For long, the movement for the consolidation of strips, beginning in the fourteenth century, had been almost imperceptible. In the sixteenth century it became widespread and clamorous.

Many agricultural writers of the time, such as Fitzherbert and Hales,* remark on it. Doubtless this encouraged interest in the technical problems of farming Fitzherbert praises enclosure for arable farming in his *Book of Husbandry* (1534) In his *Surveying* (1539) he outlines a plan by which tenants might do so, to their great benefit and without causing any social upheaval. In place of scattered strips and common rights, he urges that each should have a compact holding of arable pasture and meadow In his *Five Hundred Points of Husbandry* (1579), Tusser argues to the same effect

Both these writers were champions of enclosure, when carried out by agreement Both stressed its great advantage over the open-field cultivation. In fact they were describing a movement already under way, one which was to revolutionize the English countryside. In the vicinity of London the tenants were not slow to see the advantage of enclosure By the beginning of the Civil War considerable advances had been made. The result was a significant net increase of English agricultural output. The production of corn was not the only thing affected. The cultivation of hops, introduced into the eastern counties from Flanders at the end of the fifteenth century, had become an important industry in Kent, Essex, Suffolk, Sussex and Surrey by the close of Elizabeth's reign. Horticulture and market gardening also received a great stimulus from the growth of London. In 1617 the market gardeners of London, who had received a Charter of Incorporation some ten years earlier, claimed to be employing

"thowsandes of poore people, ould menn, women and children, in sellinge of their Commodities, in weedinge, in gatheringe of stone, etc "

Thus the demands of London had a profound effect on agriculture. By the Civil War London was drawing its food supplies from as far away as Cornwall, Wales, Berwick and Yorkshire. It is therefore clear that the greater part of England was feeling the impact of the powerful forces which were making for the commercialization of agriculture.

* *Charge to the Juries* (1548); *Discourse of the Commonweal* (sometimes attributed to Hales)

TURNIPS AND CLOVER

Flemish farmers were pioneers of agriculture in Western Europe. Living in a small and densely populated country, they were forced to devote their attention to getting the utmost out of the soil. The noteworthy feature of their farming was field cultivation of turnips and clover. These were the crops which played a major role in the agrarian revolution of the eighteenth century. It was from Flanders that English farmers learned about them. Gras tells us (*A History of Agriculture*, 1925, 183):

> "Just as the Romans borrowed much agricultural lore from the Carthaginians, and the Spaniards from the Moors, so did the English get from the Flemings the two new essential ingredients of their scientific rotation, clover and turnips."

Before the seventeenth century turnips had been grown only in gardens in and around London. Field cultivation was advocated in a book published in 1577; but knowledge of Flemish methods of cultivation was really brought before Englishmen by the efforts of Sir Robert Weston. Weston had long experience of English farming, and had fled to Flanders during the Civil War. In 1645 he published his *Discours of the Husbandrie used in Brabant and Flanders*. In this book he praised Flemish farming practice, and urged the cultivation of turnips and clover. The influence of Weston was decisive for the introduction into England of "the new farming" (Ernle, *English Farming*, 1927) The Civil War stemmed the forward movement of agriculture, but immediately after the Restoration there was a great burst of enthusiasm for every sort of improvement. "It was," says T. H. Marshall, "in the highest degree inventive and practical, and reveals a close alliance between pure science and technical economic progress."

The intellectual outburst of the Restoration was not an isolated phenomenon. It was the continuation of a movement started more than a century before, and it had its roots deep in the social and economic conditions of the time There were problems for solution in plenty. Interest in planting reflected the needs of the iron industry for wood, its essential fuel. Interest in agriculture reflected the needs of a growing population, and encouraged imitation of Flemish farmers Hogben* has drawn attention to the parallel development of theoretical science in relation to the same social needs. In 1662 the Royal Society was incorporated "to promote the welfare of the arts and sciences." One of its first actions was to appoint a number of committees to deal with special fields of inquiry.

The Georgical or Agricultural Committee is the most interesting in the present context. Convinced that the sure way to promote the interest of farming was first of all to collect evidence of the actual state of cultivation throughout the country, its members prepared "Heads of Enquiries." These were printed in 1665 in order that they might be "the more universally known" and that persons skilful in husbandry might be "publickly invited to impart their knowledge herein, for the *common* benefit of the Countrey."

* *Science for the Citizen* (in this series).

Among the subjects on which the Committee sought information were the different kinds of soil and their preparation for crops; the use of manure; the sorts of grain sown and their yields, "the common Accidents and Diseases befalling Corn in the growth of it, being Meldew, Blasting, Smut; what are conceived to be the Causes thereof and what the Remedies?" the methods of ploughing and reaping; "the best waies of Drayning Marshes, Boggs, Fenns, etc."; the several kinds of grass; and "what kind of Grass is fittest to be preserved for winter-feeding."

Whether the Plague interrupted the inquiry is uncertain. The only replies known to have been received came from Yorkshire, Kent, Devon, Cornwall, and parts of Dorset and Gloucestershire. Mr. Lennard, who has analysed the replies (*Econ. Hist. Rev.*, October 1932), remarks on the prominence in the returns of convertible husbandry. In earlier times the general practice had been to keep the arable land distinct from meadow and pasture. Now this distinction was breaking down. Land was put to alternative uses, and the change marks an important step towards rotation of crops. The whole of this inquiry, promoted by the Royal Society, is remarkable in so far as it was "a brave attempt . . . to link up book-learning and scientific research with the experience of practical farmers."

It is unlikely that the immediate adoption of new crops, or of new methods of cultivation advocated by such pioneers as Weston, Hartlib, Blyth and a score of others, was spectacular. Great diversity of agricultural and economic conditions, and extravagant claims of agricultural writers conspired to prevent rapid change of practice Still, everything points to a steady movement towards improved cultivation in those counties influenced by the growth of towns, and especially by the development of the London market. Henceforth, there is also a steady increase in the output of publications on every aspect of agriculture, and it is surprising how often they anticipate scientific theories of the nineteenth century For the microscope has brought in its train a new understanding of reproduction among seed plants, with practical repercussions in horticulture Botanists are beginning to fumble with soil chemistry and plant growth The classification of plants takes a forward leap, while the science of plant-breeding and plant-nutrition also gains encouragement from the trading and colonial ventures of the seventeenth century which opened up a new world of plant and animal life.

It was a period of incubation for agricultural science. Gropings towards understanding of how plants feed lie at the foundation of progress in arable farming Though almost 200 years were to elapse before our contemporary picture of plant-growth clarified, we can see the beginnings of a science of agriculture in the closing years of the seventeenth century. In the middle of the seventeenth century, Glauber discovered that saltpetre (or, as we should now say, *nitrates*) is the "essential principle" of manure In *The Anatomy of Plants* (1682), Nehemiah Grew hinted that the inorganic substances of which plants are composed, i.e "Marine Salt" and "an Essential Salt, or Nitre of Plants," may enter the plant from the air as well as from the soil. Others like Bradley, Professor of Botany at Cambridge from 1724 to 1732, and the English physician Stephen Hales (1717) carried Grew's idea a stage further. Bradley suggested that different crops require different elements of

plant life so that "by changing of crops, a piece of ground need never lie idle." Here was the idea of rotation of crops. Switzer and Robert Maxwell (*Select Transactions of the Society of Improvers in the Knowledge of Agriculture in Scotland*, 1743) hinted that clover takes nitre from the air and gives it to the land, a conclusion which anticipated the results of laboratory investigation not completed till more than a century later.

Though agricultural innovators of the seventeenth and eighteenth centuries did not arrive at a full understanding of the processes involved, they proved the value of an epoch-making discovery by empirical methods This revolutionary innovation was the *rotation of crops*. If one crop enriches the soil with an important element required by a subsequent crop, it is possible to devise a rotation which does away with the need for the old fallow system, with its half or third of the arable land lying idle each year. Planting a field with clover, sainfoin, or other leguminous crops prepares it for a fresh crop of cereals like wheat, oats and barley, or root crops. The reason is that the roots of clover and other legumes bear small nodules infested with bacteria which extract nitrogen from the air. At the end of the season the soil, on which clover with its nitrogen-fixing pasture has grown, contains more nitrates than it did at the beginning In our next chapter we shall see how the process of rotation which depends upon this fact influenced the social relations of the countryside.

CHAPTER II

CAPITALIST FARMING AND LANDLESS LABOURERS

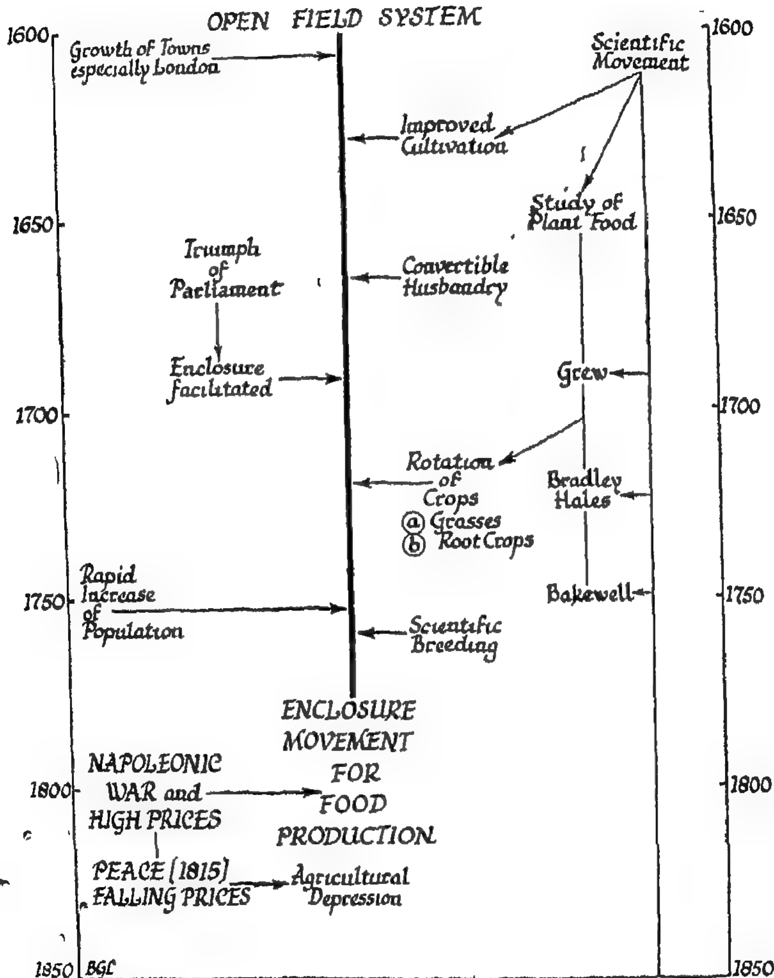
THE years between 1760 and 1830 witnessed a transformation of the British countryside The old open-field system with its strips and rigs, its commons and its village cultivators, gave place to a modern countryside of compact farms and enclosed fields. Agricultural practice and social organization alike changed fundamentally. In England the transition is usually called the *enclosure movement*. A title which would also fit Scottish conditions is the *agrarian revolution*. Our last chapter ended with the introduction of clover and the effects which its cultivation must have Rotation of leguminous and cereal crops abolished the necessity for leaving a third or a half of the arable land fallow each year It obliterated the need for a separate infield and outfield. Clover and grasses give the farmer an intrinsically valuable crop, and actually enrich the land by fixing nitrogen in the soil Another feature of "the new farming" was the field cultivation of turnips and potatoes When the eighteenth century opened they were still unknown in many districts of England and Scotland

Two eighteenth-century writers, Jethro Tull (1674–1741) and Lord Townshend (1674–1738), were foremost in popularizing the importance of root crops in a general plan of cultivation. Influenced by the methods practised in the vineyards of France where the soil was kept clean by frequent ploughings, Tull advocated sowing seeds in drills or rows and keeping roots open by light ploughing between lines of growing crop. His noteworthy contribution to the new farming was the emphasis he placed on drill cultivation, on economy in seeds, and on clean farming. Lord Townshend is chiefly famous for the cultivation of turnips and clover on his estate of Raynham in Norfolk There he had retired after a long and active political career By careful and prolonged experiment he worked out a rotation of crops which soon became famous as the Norfolk Four Course Rotation The essential feature of this rotation was the alternation of cereal crops with roots and leguminous plants, viz (1) wheat, (2) turnips (the cleaning crop), (3) oats or barley, (4) clover (the leguminous crop with its nitrogen-fixing bacteria, enriching the soil with nitrates)

Differences of soil and climate, the strength of tradition and custom, ignorance, and the lack of capital prevented the speedy adoption of Townshend's plan. Still, it struck at the foundations of the old open-field system of England and of the infield and outfield of Scotland. The food supply was increased directly by the addition of turnips and potatoes. It was indirectly increased by the larger number of live stock it was now possible to carry. One of the most urgent needs of pastoral farming was the provision of adequate winter feeding Hitherto the great problem of the farmer had been to feed his cattle in winter time The mortality of cattle was enormous,

and in the autumn it was the custom to kill off large numbers because of the sheer lack of food

Root crops solved this problem. Indeed, the introduction of turnips and clover was the keystone of eighteenth century agricultural progress They enabled the farmers to carry bigger and better fed stocks, the larger stocks



TIME CHART 2: THE ENCLOSURE MOVEMENT

provided more manure for the enrichment of the soil, this in turn meant better and more abundant crops, and more abundant crops made larger herds possible.

"Thus," says Lord Ernle, "to the hopeful enthusiasts of the close of the eighteenth century the agricultural circle seemed capable of almost indefinite and always profitable expansion"

Norfolk, hitherto distinguished for its light, sandy and rather barren soil, now became famous for its pastures where cattle were fattened for the Smithfield market Thousands of Highland cattle, emaciated and foot-weary after their long trek from the most remote parts of Scotland, made Norfolk their halting-ground. There they fattened for weeks on end before reaching haven in Smithfield. Increased supplies of cattle fodder also prepared the way for another improvement in stock-raising Robert Bakewell (1725–95) showed what an important contribution systematic inbreeding might accomplish Hitherto sheep had been valued for wool and cattle for strength Both were hardy beasts, but there had been no interest in breeding for food quality. Indeed, the practice of stock-breeding, as Ernle puts it, was "the haphazard union of nobody's son with everybody's daughter."

Bakewell's experiments at his farm at Dishley in Leicestershire changed all this Rapidly growing population concentrating more and more in the towns provided the incentive Mutton rather than wool, beef rather than muscle, was the message of the towns, and Bakewell heard it. To satisfy the demand for food Bakewell embarked on the work for which he is famous. He selected his stocks judiciously, bred in-and-in, fed and tended his herds carefully, kept elaborate genealogical tables, and as a consequence reared beasts of greatly improved quality. He was specially successful with sheep. His Leicesters became famous far and near. Though he tried to keep his methods secret, others quickly adopted the principle of inbreeding. Before the end of the century British flocks and herds were the admiration of foreign visitors.

SOCIAL CHANGE

In theory at least, it is easy to see how the new farming must affect the old village arrangements. With rotation of crops it would no longer be necessary to divide the arable land into two or three great fields, as was common in England. In Scotland the old distinction between infield and outfield would go Along with these changes, consolidation of holdings and enclosure by stone wall or hedge would accompany the adoption of crop rotation This movement towards a more individualistic type of farming, facilitated by the invention of better ploughs and harrows, would be reinforced by the desire of farmers to take full advantage of the rapidly expanding market for food. Scientific breeding of cattle and sheep demands segregation. And this in turn involves abolition of common lands, a further drive for the enclosure of fields.

So far theory. In practice the movement was spasmodic. It was not nearly so clear-cut as one might suppose If an important invention turns up in manufacturing industry, every manufacturer has to take it up or to go under. The manufacturer cannot survive if he uses spinning-wheels when others are profiting by power-driven machinery. For a variety of reasons the penalties of conservatism in agricultural enterprise are less exacting. Among others, the farmer is less dependent on large profits because he directly produces more of his own necessities. In the past he has catered for a more local

market which limits the sphere of competition *vis-à-vis* prices. Conditions which limit mobility of agricultural labour protect the employer against demands for higher wages Cultural isolation of the countryside impedes rapid diffusion of new knowledge, and local differences of soil complicate the application of it

Besides all this, we have to take into account another fact. It took time to introduce new methods which involved radical changes in the general arrangements of the village or township. So much depended on landowners who were willing to give security and reasonable leases to tenants. So much depended on farmers having some understanding of the new crops and new methods. So much depended on sufficient capital to pay for fences, hedges, seeds, implements and so on. So much depended also on improved transport without which farmers could not market their produce (Fig. 6).

By whatever means the change took place, fundamental social change was inevitable, and the story has often been told. Each year some new investigator modifies a previous conclusion and throws fresh light on the social and economic revolution which so vitally affected the English countryside. The Enclosure Movement, which shaped the future course of English farming, has a double meaning In common parlance *enclosure* means the physical enclosure of fields by hedge or stone wall. As economic historians use it, it signifies substitution of individualist farming for collective husbandry

Consolidation had been taking place for many centuries. By bargaining and by purchase, strip was added to strip, and holding to holding, to make compact farms. Rapid growth of population, more especially after 1750, speeded the process enormously. Day by day the market for wheat, meat, potatoes and dairy produce increased. So it was a paying proposition to enlarge farms and to produce for the market. One ardent improver, Sir Archibald Grant of Monymusk in Aberdeenshire, has left voluminous correspondence and estate papers which throw a flood of light on the progress of the new farming in Scotland. He is emphatic that estate-owning offered vast opportunities for gain

> "There is as certain and large estates to be got in husbandry," he writes in 1740, "as in any employment and where more probably than in this country, where it is little introduced, and ready sale and prices for Everything; and no Business of Life is more rational more quiet and Agreeable, affords profit with greater certainty and less Risk, if but tollerantly attended to without fatigue and things put into methode."

In all probability, piecemeal enclosure in England, together with widespread intakes from moor and waste, especially in the hilly districts of the northern counties, came about with little disturbance to the normal life of the village, but any large-scale attempt to substitute individual farms for intermixed holdings was bound to undermine the structure of village life. Extensive consolidation and enclosure of arable strips affected the lay-out of the village lands and the system of co-operative working. Demand for compact holdings in place of rights to common and waste resulted in the

disappearance of the common lands which had been a fundamental constituent of village economy. Many large-scale enclosures were carried out by private agreement between the principal landowners concerned, but the variety and complexity of common rights made it more customary to promote agreements confirmed either by the Court of Chancery or, from about 1740 onwards, by private Acts of Parliament

The usual procedure was for the chief landowners, the lord, the tithe owner and the large freeholders to petition Parliament for an Act. On the Second Reading, Commissioners were appointed to visit the parish and make the division Since the whole business was usually carried through by those with the largest financial stake in it, there was little consideration for the small men whose title was not legally clear, or for the small cottager who had grazed his beasts on the common land "within the memory of man." In 1771 Arthur Young writes·

> "Thus is the property of proprietors, and especially of the poor ones, entirely at their mercy, every passion of resentment and prejudice may be gratified without control, for they are vested with a despotic power known in no other branch of business in this free country."

Or again in 1801 he says·

> "By nineteen out of twenty Inclosure Bills the poor are injured, in some grossly injured. . The poor in these parishes may say, and with truth, Parliament may be tender of property all I know is that I had a cow* and an Act of Parliament has taken it from me"

The area most affected by enclosure at this time was a broad belt (Fig. 7) stretching from the coast of Yorkshire to Dorset on the one side, and London to Norfolk on the other. This area was the focus of most controversy concerning the effects of enclosure on the small man. At the opening of the eighteenth century a large part of this region was in the hands of yeoman farmers who were virtual proprietors by custom, law or inheritance. How far this class was greatly reduced in numbers by the beginning of the nineteenth century, and, if so, how far enclosure by Act of Parliament was responsible, is open to question What is clear is that before enclosure by Act of Parliament reached its height, occupying owners, including freeholders, copyholders and lessees for lives, were rapidly disappearing. Tenant farmers were taking their place

Too much attention has been placed on the Enclosure Acts as the primary agency which brought about a change of personnel in the English countryside Before enclosure became general there was considerable social differentiation within the peasant class. By purchase or by leasing some peasants came to work large farms A wide social gulf already separated these from the small freeholder or copyholder who worked his one to twenty-five acres In an investigation into parliamentary enclosure in Suffolk, Professor Lavrovsky shows that out of 205 peasants who had old enclosed land in a group of parishes 92 owned 3 acres or less, or 1·2 per cent of previously enclosed

* Not in "nineteen out of twenty" parishes had the poor cows, but if the cow were only geese the argument holds (Clapham 1, 117)

peasant lands; 51 owned 3 to 25 acres, or 8·2 per cent; 54 owned 25 to 150 acres, or 58·8 per cent; and 8 persons (5 of whom owned 150 to 200 acres and 3 over 300 to 400) held 31·8 per cent of all the old enclosed peasant land. He says (*Econ. Hist. Rev.*, May 1937):

"This conclusion is of great interest for it proves the sharp differentiation which existed among the peasantry at the time of the parliamentary enclosure."

Capitalist elements penetrated into the English village in another way One of the striking features of agrarian economy in England, brought out by recent investigators, is the rapidly growing importance of leaseholding, before enclosure reached its peak Mr. Davies, who has investigated a number of Midland parishes, tells us (*Econ. Hist Rev.*, January 1927) that by 1780

"the occupying owners, including the freeholders, copyholders and lessees for lives, had ceased to be an outstanding feature of English rural economy."

In the parishes he investigates, he found that nearly 90 per cent of the land was in the occupation of tenant farmers. Lavrovsky gives us some figures with reference to Suffolk. At the time of enclosure, peasant landowners (mainly freeholders) were common, but more than 50 per cent of such property was let out to tenants.

"According to the claims of enclosure on nine Suffolk parishes, tenant-leaseholders were the most numerous group of the rural population in these parishes and leased 72 1 per cent of the total area of old enclosures."

These developments were taking place before a great wave of enclosure coincided with the Napoleonic Wars. Enclosure Acts did not bring any immediate fall in the number of peasant-owners The tendency was rather the other way. Usually the division of common rights resulted in the creation of new owners Meanwhile differentiation proceeded rapidly. Peasants with very small holdings unable to bear their share of fencing and legal costs, realizing that a compact holding was of much less value to them than their old strips and common rights, sold out to larger people. Others, influenced by the prosperity of the larger capitalist farmers, sold their small patrimonies to lease a farm and to become "great farmers." The general result was to increase the share of land held by the richer peasants.

Another circumstance made for concentration of land ownership This was tithe commutation. Where it was effected by land alienation, holdings dwindled or disappeared. The Church or the lay impropriators gained what the peasants lost. Without doubt enclosure bore heavily on the small peasant, and no compact allotment could compensate him for the loss of common rights. The new farming demanded capital, and it is unlikely that landlords were prepared to make advances to those who had little or none, as they did to the bigger farmers. Many had no option but to sell and to leave the land or to become farm labourers Those who stayed behind benefited

from high war prices, and many added to their holdings by purchase or lease.

Population was expanding in Napoleonic times, and the area of cultivation was pushed back into moor and hill; but many of the small people sold out and left the land in the twenty odd years of bad times for farming that followed the peace of 1815. They were not the only sufferers. Many large farmers, who had over-reached themselves during the boom years, now found themselves in arrears with rent and over-burdened with debt Small tenant-leaseholders were probably more immediately affected by enclosure than any other class Under an Enclosure Act all existing leases were annulled Technically some compensation was to be paid to lessees, but there was no guarantee of reinstatement after the commissioners had done their work.

One of the worst features of enclosure was the wholesale division of the ancient common lands, and especially those which might have served as lungs for the rapidly-growing industrial towns In the parish of Sheffield, Barbara Hammond tells us, enclosure of 7,385 acres of common and waste ground took place between 1779 and 1810 "without one rod, pole or perch set aside for the purposes of public recreation." The process was carried out in the teeth of opposition by the townspeople. In 1833 a witness before the Committee on Public Walks was asked whether Sheffield possessed any such walks or open places. He replied, "The town is singularly destitute of anything of the kind." Not until the General Enclosures Act of 1845 was there any attempt made to safeguard the commons in the interests of the town dwellers By that time it was too late.

REVOLT OF THE FARM LABOURERS

Creation of large farms, whether leasehold or freehold, swelled the ranks of farm labourers Some may have received a cottage and other perquisites as part of their remuneration. Otherwise they were like other wage-earners, standing in the same relation to the farmer as factory operatives to industrial capitalist The rise of this class goes far back in history. In medieval times, cotters whose holdings were too small for subsistence, had to do wage work. With the growth of capitalist farming, this class of small holder became a recruiting-ground for farm labourers. Throughout the period of enclosure the labourer class grew apace.

During the Napoleonic War, when prices were rising and farming was booming, economic hardships of the labourer were mitigated by addition to their inadequate wages from the poor rates. Below the surface there was great discontent which had to find an outlet. J. L and Barbara Hammond (*The Village Labourer*, 1760–1832) have portrayed the sufferings of the labourers during this period. Pauperized and sweated, the labourers contrasted their position with that of the landlords, whose rents had often risen five-fold, or with farmers whose style of living had gone up when profits soared. Matters came to a head in 1816 A fall of the price of corn had been checked by the Corn Law of 1815, and a bad harvest sent prices soaring in the following year. There were riots of labourers in the East Anglian counties. Farm houses and stacks were set on fire. "A reduction in the

price of bread and meat was the avowed object of the rioters" at Bury in Suffolk No less than 1,500 of them paraded the neighbouring villages. According to the *Annual Register* (1816),

"they were armed with long, heavy sticks, the ends of which, to the extent of several inches, were studded with short iron spikes, sharp at the sides and points. Their flag was inscribed '*Bread or Blood*,' and they threatened to march to London."

Both in Bury and in Norwich there were encounters with the yeomanry At Littleport in the Isle of Ely the rioting continued for several days. In the conflict with the military two labourers were killed and seventy-five were made prisoners. The latter came before a Special Commission. At the end of the trial twenty-four labourers stood capitally convicted. Five were hanged, nine were transported, and ten were sent to jail for a year

Post-war depression in agriculture worsened the economic position of the labourers. While farming was prosperous, landlords and farmers alike were ready to supplement low wages from the rates This lavish relief of war days came to a stop There was no incentive to anyone to pay a living wage, when they knew that any deficiency would be made up from the rates. So the policy of subsidizing wages had had the effect of reducing wages A Committee on Agricultural Wages in 1824 reported that wages were 12s. to 15s in some northern counties, where the *Speenhamland System* of subsidizing wages from rates on a sort of sliding scale family endowment basis did not operate. In the south, where the system was long established, they varied from 3s. to 8s or 9s. per week In one parish of Kent, 6d. a day, and in the majority of parishes a shilling, was the lowest wage.

Thus the Speenhamland System had the effect of depressing wages According to the Hammonds, low wages resulted in a great wave of poaching, which a land-owning Parliament tried to check by ferocious penalties. Discontent of the labourers came to a head in 1830. The immediate cause of what has come to be called "the last labourers' revolt" was the introduction of the threshing machine. By displacing the hand flail, it had destroyed one of the labourers' last sources of extra earnings. In August, rioting began in Kent. By November it had spread to Sussex, where the movement took shape as an organized demand for a living wage. A special correspondent of *The Times* (November 1830) says:

"Divested of its objectionable character as a dangerous precedent, the conduct of the peasantry has been admirable. There is no ground for concluding that there has been any extensive concert amongst them. Each parish, generally speaking, has risen *per se*; in many places their proceedings have been managed with astonishing coolness and regularity, there has been little of the ordinary effervescence displayed on similar occasions. The farmers have notice to meet the men: a deputation of two or more of the latter produce a written statement, well drawn up, which the farmers are required to sign . Where disorder has occurred, it has arisen from dislike to some obnoxious clergyman, or tithe man, or assistant overseer, who has been trundled out of the parish in a wheelbarrow, or drawn in triumph in a load of ballast by a dozen old women The

farmers universally agreed to the demands they made. that is, they were not mad enough to refuse requests which they could not demonstrate to be unreasonable in themselves, and which were urged by three hundred or four hundred men after a barn or two had been fired, and each farmer had an incendiary letter addressed to him in his pocket"

Hatred of the poor law and poor law officials, opposition to labour-saving machines, demands for higher wages, were the characteristics of the revolt, as it spread from the south-eastern counties to Berkshire, Hampshire and Wiltshire The following resolutions drawn up by the labourers and signed by the farmers at a Sussex meeting are typical

"Nov. 5, 1830 At a meeting held this day at the Red Lion, of the farmers, to meet the poor labourers who delegated David Noakes Senior, Thomas Henley, Joseph Bryant and Th Noakes to meet the gentlemen this day to discuss the present distress of the poor . . Resolution 1. The gentlemen agree to give to every able-bodied labourer with wife and two children 2s 3d per day, from this day to 1st of March next, and from the 1st of March to the 1st of Oct. 2s 6d. per day, and to have 1s 6d per week with three children, and so on according to their family. Resolution 2. The poor are determined to take the present overseer, Mr Abell, out of the parish to any adjoining parish and to use him with civility" (quoted Hammond, 223, 225).

By that date the rising had become more serious. Workhouses were wrecked, hayricks put to the flame, and threshing machines destroyed Farmers were threatened with violence unless they acceded to the demands for higher wages; but a revolt so ill-organized, and one carried on by half-starved labourers, could not hope to succeed. The government drafted troops to disaffected areas. The rising collapsed as suddenly as it had flared up. There were numerous arrests, and a special commission was appointed to try the prisoners. When it had finished its labours nine men had suffered the extreme penalty of the law, 457 were transported, and about 400 were flung into prison at home These savage sentences left behind them a bitter memory for many generations

THE AGRARIAN REVOLUTION IN SCOTLAND

During the eighteenth century the same social agencies affected Scotland and England alike, remodelling the old system of infield and outfield and putting in its place the modern farm with its enclosed fields Because Scottish conditions were different from those in England, the movement proceeded on different lines Most people on the land were tenants, either at will or on short lease, and common lands, in the English sense of the term, did not exist in Scotland—except in the Royal Burghs A landlord who wished to bring the old infield and outfield system to an end could carry through the process without the sanction of anyone else. There were Acts passed by the Scots Parliament in 1695—one dealing with "commonties," that is, undemarcated areas between estates, and another with intermixed holdings of proprietors, but they had only a very limited application and concerned proprietors only Otherwise there were no measures comparable to the

English Enclosure Acts. Agrarian change in Scotland came from the initiative of proprietors. This explains its great irregularity.

About the time of the Union, turnips and leguminous crops invaded the lowland counties; but disturbance to trade caused by establishment (1707) of free trade with England delayed progress until the twenties In 1723 a number of landowners, alive to the merits of the new husbandry and to the defects of the old, founded the *Honourable The Society of Improvers in the Knowledge of Agriculture* It soon numbered among its members almost all the prominent *heritors* (landowners), as well as many lawyers and ministers. At its first meeting several committees were appointed to deal with particular branches of farming. They were directed to

"mark down their thoughts in Writing . . . and to correspond with the most Intelligent in all the different Counties in the nation, concerning their different ways of managing their Grounds, that what may be amiss may be corrected, and what is profitable imitated "

A sort of information bureau was set up. Farmers and others were invited to send in particulars of any difficulties they experienced in their work. They were to be given advice without any charge, except for postage. The following words of the Secretary, himself a prominent agricultural improver, show how they were influenced by the new scientific approach to farming.

"Agriculture," he writes in 1743, "is not only a Science, but the life and support of all Arts and Sciences, and yet the generality of Land-labourers work more like Tools or machines, than Men of Reason, going on blindly, as led by Custom, in the often unaccountable ways of their Forefathers Their proceeding upon no Principles, or, if upon any, upon wrong ones, makes it necessary that it should be taught in a College-way, as other Sciences are. The Crown names Professors, and gives them Salaries. Which of them can be more useful to the Publick, than a Professor of Agriculture might be?"

At the opening of the eighteenth century the Scottish *clachan* or toun was a small hamlet consisting of the houses of several tenants and sub-tenants. The former generally held leases from the landlord, the latter holding from year to year from the tenants. The system of cultivation had changed little, if at all, since medieval times. There was the infield and the outfield, the rigs, the great lumbering Scots plough with its team of eight or ten oxen, and the crops of oats and barley raised with monotonous regularity. Some pease and beans were also grown, and each cottage had its kailyard, providing green food. Side by side with the poor hovels of the people themselves were the byres, grass houses, stables, muckle barns, and kilns where the soaked barley germinated under heat, making the malt for ale, the common beverage Tenants largely paid their rents in kind. In 1714 the rent of one tenant in Aberdeenshire was 17 bolls of meal (to be carried to Aberdeen or a similar distance at the tenant's charge); £13 13s. 4d. (Scots money = one-twelfth Sterling), one hog, one load of peats, six hesps of linen yarn, three geese, six capons, twelve hens. In addition the same tenant had to do some work at the heritor's farm.

The story of an estate of Monymusk in Aberdeenshire illustrates how this ancient system changed into the modern countryside. The proprietor, Sir Archibald Grant (1696–1778), was one of the leading agricultural improvers of the eighteenth century. He has left voluminous records of his work. When he came into the estate in 1716 the land was bare and desolate, unlike the fair and pleasant country it is to-day. His first act was to plant trees. Agricultural improvements at Monymusk seem to have followed two main lines of development. Anxious to put an end to the wasteful over-cropping of the infield and outfield, Grant tried to introduce the English *fallow* system. By inserting clauses in their leases he compelled his tenants to *rest their land at regular intervals*. Here is an extract from a *tack* (lease) of 1735:

"The said James Moore obliges himself to labour and manage the said possession in manner following viz. to divide the whole of the arable and pasture grounds of the said lands into two equal parts, the one half for pasture and the other half for tillage, and to leave out annually in summer fallow one fourth part of the said half for Tillage."

Previously it had been the custom to crop the infield continuously year after year, and to cultivate the outfield until the soil was completely exhausted. So the introduction of a fallow system was an important step forward. The next step was the adoption of crop rotation. When this came to fruition the fallow system came to an end, but it was a very slow process. In the eighteenth century farming was essentially experimental. Farmers and landowners were groping their way towards a new technique. About 1720 Grant was planting turnips on his home farm, and shortly afterwards he received his first consignment of clover seed from Holland. For many years he experimented with these new crops. Then he urged his tenants to follow his example. In a tack of 1740, when two holdings were thrown together to make a large-sized farm, the tenant was obliged to plant clover seed supplied by Grant. In another tack a tenant was to sow turnips

"in order to destroy the small weeds which check the Crop and Discourages from sowing Bear. It is thought sowing in the first year with turnips and potatoes will effectually clean the Ground and prepare it for a good crop of Bear, and will be the only effectual method to make the Ground proper for Intown."

In his *Plan for New Husbandry* (1760) Grant shows that he had then arrived at a practical grasp of crop rotation. His plan was to divide the arable land into four divisions—one to be sown with turnips in drills, another with pease, another with barley and clover, and the fourth with oats. There is the essential principle of rotation—the alternation of cereal crops with leguminous plants and winter-roots like turnips. This was the climax of the agricultural improvements. Fallow could be dispensed with and the division between infield and outfield abolished (Fig. 8).

The new husbandry of turnips and clover involved field enclosure with hedges or stone walls, and the creation of compact holdings instead of scattered rigs. For its full development it required the creation of larger

farms than were common at this time. In Scotland the landlord carried through these changes by compelling his tenants to build stone walls or plant hedges, and by enforcing the exchange of rigs so as to secure a compact holding. Here is an illustration in a tack of 1739

"The said four tenants hereby oblige themselves either to Agree among Themselves and the rest of the crofters for an Exchange Betwixt those in the Upper and Lower ends of the Toun of so much of Respective Lands as lye Discontigeous or Intermixed and in case they cannot agree the said Sir Archibald shall have power to name two or three Barleymen (*arbiters*) to see the said Exchange."

When the consolidated farms were too small to be worked economically Grant sometimes threw farms together, and removed redundant tenants to new farms or to the outskirts of the same farm where abundant waste land was available for tillage. This was usually done when a lease expired Usually the tenant of a new holding on hill or waste paid no rent for a few years. Thereafter, beginning with a small payment, the rent went up annually to a certain sum. On other lands, leases contained provision for increased rents at regular intervals. Thus the landlord had the satisfaction of seeing his rent-roll mount yearly. He would insert a clause providing for a stone wall (*dyke*) in the lease or would employ men to build one and recoup himself by charging interest on capital expended The stones came from the fields, and the use of them cleared the ground enclosed. Here is an item from Grant's *Labour Journal* (1735–63).

"10 June, 1741. Agreed with William Glennie in Dykehead to run a dyke of 42 inches thick at bottom and 30 inches at Top of one ell in height from the corner of the new Enclosure at Mains to the corner of the enclosure at Tilledraven in one straight line . And to take all the stones from within the said enclosure leaving it smooth for ploughing. And not to leave a stone in said Enclosure which 3 men can roll to the dyke, or 4 men can carry upon a Barrow."

Grant found it very difficult to convince ordinary tenants of the advantages of new ways. Time and again they obstructed him, sometimes by cutting trees or letting their cattle wander inside enclosures. At other times they would remove gates and pathways made through young plantations. Apparently, in desperation, he drafted an oath to be taken by them:

"I, A B , do solemnly swear in the presence of Almighty God, as I hope for salvation and with my family or business to thrive, and that no Grievous Accidents or punishments temporall or Spiritual shall happen to myself, that I shall tell the Truth and conceal no part of the Truth. That I have not allowed any of my beasts to eat Sir Alexander Grant's grass, nor know I, if any of my beasts have done so by design or neglect of others, nor taken any of his peats these three years, nor cut any of his wood, nor my beasts been amongst it, nor made roads through his Inclosures, nor taken firr "

By example, by coercion, or by a mixture of both, Grant transformed his estate Fine plantations and an advanced system of farming were the admiration of visitors from far and near The curious may still walk through *Paradise* at Monymusk where the trees were planted more than two hundred

years ago, and the record of improvements made there gives us a concrete example of the way in which rural change came about in eighteenth-century Scotland. Grant was more advanced than most of his fellow-landlords. In many parts of the country the improvements did not creep in much before 1800.

By that time the possibilities of the food market had become obvious to most proprietors, and the "improving movement" gathered momentum during the Napoleonic War. As in England, farmers prospered through high prices and landlords saw rents increase by leaps and bounds In parts of the Highlands where land was unsuited for improved arable farming, vast areas were turned into sheep walks to supply wool for industry in Tweeddale and Yorkshire The ruthlessness with which *clearances* went on in Sutherland and Ross-shire aroused bitterness and resentment, still alive to-day. Crofters were cleared off their land Houses were pulled down before their eyes Hundreds of the evicted had to emigrate. The calculus of profit did its work without pity for the people, tramping on ancient customs and causing untold distress to the innocent.

NATIONAL PROPAGANDA

First and foremost, stimulus to improvement had come from an expanding food demand. Between 1700 and 1760 the population of England and Wales rose by 23 per cent During the next forty years the rise was not less than 32 per cent. The cry of the towns was for more bread, more meat, more milk, more cheese, and more potatoes Prices rose accordingly. Between 1716 and 1765 the average price of wheat had been 35s per quarter. For the next three decades prices were 51s , 43s and 47s respectively. So great a demand absorbed almost all the farmer could produce Britain gradually ceased to export corn. It began to import.

To overcome the conservatism of farmers two pioneers, Arthur Young (1741–1820) in England and Sir John Sinclair (1754–1835) in Scotland, worked incessantly As a practical farmer Young was a failure As a publicist and writer on agricultural subjects he was an outstanding personality He toured the countryside at home and abroad In England, in Ireland, in France and in Italy he was a well-known figure Some say that a nagging wife was partly responsible for the wanderlust Anyhow, he spared no effort to spread the gospel of "the new farming" He condemned open fields and commons, and proclaimed the merits of the new crops. He urged creation of large farms, and reasonable leases for enterprising tenants with capital When the Board of Agriculture started in 1793, he was its first Secretary As such he now had boundless opportunities for propaganda on a national scale.

Sir John Sinclair did the same kind of work in Scotland, though perhaps in a more practical way He experimented on his estate in Caithness with new crops and new rotations He planted trees and improved the breed of sheep and cattle. Largely through his influence, the Board of Agriculture* was established, with Arthur Young as Secretary, and he was its first President Impressive investigations which Sinclair set on foot—an inquiry

* Not a Government Department at this date—a private body with Government funds

into the agriculture of every county in Great Britain, and the famous *Statistical Account of Scotland* (1791–9)—are a mine of information about almost every aspect of contemporary social and economic life.

The efforts of these two men did more than those of any others to stimulate improvement and to spread new knowledge of farming Their inquiries represent the first large-scale attempt to make a scientific survey of national industry. The first Chair of Agriculture in a Scottish University was founded at Edinburgh in 1790. Meanwhile, numerous agricultural societies were popularizing scientific agriculture. They organized ploughing matches, cattle shows, and the like. One of the most famous was the "Highland Society" founded in 1784. In England the Bath and West of England Society, 1777, the Smithfield Club, 1798, the Farmers' Club, 1793, are among the more outstanding, but there was scarcely a parish without its own Society.

AGRICULTURAL DEPRESSION

The end of the Napoleonic War saw declining progress of enclosure. Landed interests, alarmed at the prospect of importations and a probable fall of prices and rents, passed the famous and much-hated Corn Law of 1815, in the teeth of a tremendous outcry, backed up by hundreds of petitions from the working classes. The Corn Law excluded foreign corn from the home market when the price was at or under 80s. per quarter, and with certain minor amendments it remained on the Statute Book until 1846. Its repeal was a victory for the consumer, who wanted cheap bread, and for the manufacturer, who welcomed cheap bread as a check to rising wages, over landowners and the farmer class who rated national prosperity in terms of high rents and high prices.

If prosperity for agriculture was its mission, the Corn Law did not discharge it. The high costs of war-time—rents, taxes and rates—were not easily adjusted to a lower price level. More especially after a break in prices in the year 1820–1, farming settled down to a long period of depression, and the clouds did not begin to clear till 1837. Meantime there were arrears of rent. Land went back to grass Those who had borrowed to enlarge their farms had their property sold up. Wages tumbled. Parishes were less disposed to sustain their poor As mortgages were foreclosed, the ranks of the owner-farmer were thinned, and "when the clouds cleared about 1837," says Heaton (*Economic History of Europe*, 1936, 433), "the English land system had become set in a mold different from that of any other European country." The agricultural trinity was made up of the large landowner, the tenant farmer, and the landless labourer.

DRAINAGE AND SOIL RESEARCH

Post-war depression stimulated interest in drainage and agricultural research As early as the sixteenth century small schemes of land reclamation had been effected, notable in Middlesex and in the eastern counties; but ridge cultivation had provided the main method of draining arable lands till the eighteenth century A group of English and Dutch capitalists undertook the first large-scale drainage scheme in the Fen district in the days of

Charles I. They enlisted the services of Cornelius Vermuyden, a Dutch expert. The opposition of the fenmen who disliked exchanging the pastime of shooting geese and wild fowl for settled agriculture, heavy outlay of capital and the ravages of the Civil War, checked the enterprise. The scheme was not finally completed till the nineteenth century. The most spectacular reclamation scheme carried out in Scotland was drainage of the Moss of Kincardine in the county of Perth. This was in the eighteenth century

Between 1760 and 1830 there were considerable advances in drainage of water-logged land. In this work Joseph Elkington, a Warwickshire farmer, was a pioneer. His method of deep draining involved large capital outlay. So it was not suitable for ordinary land At the end of the period James Smith, Manager of the Deanston Cotton Works in Perthshire and an ardent agricultural improver, showed that shallow drains filled with stones, plus sub-soil ploughing, were sufficient for most arable land In 1831 he published his *Remarks on Thorough Draining and Deep Ploughing*, and "The Deanston System" was soon on the lips of everyone Pages of discussion devoted to it filled the Journal of the Royal Agricultural Society when it was founded in 1838 Great progress resulted from applying it in the Lothians and in Perthshire, but in many parts, especially in England where stones were scarce, effective drainage called for production of tile pipes. So progress was more slow

Another technical improvement that attracted attention at this time was the application of soil chemistry to agriculture. We have seen in the previous chapter that soil chemistry began in the seventeenth century with the work of Glauber, Mayow, Nehemiah Grew, Stephen Hales, and others less well-known A lively interest in the chemical aspects of manufacture, as, for example, in the bleaching of linen and in the smelting of ores, began to infect agriculture in the closing years of the ensuing century. Francis Home, Professor of *Materia Medica* at Edinburgh University, author of an important advance in the bleaching process, gave the lead in the study of "how far chymistry will go in settling the principles of agriculture." In 1756 he published his *Principles of Agriculture*. The more the farmers "know of the effects of different bodies on plants," he declared, "the greater chance they have to discover the nourishment of plants."

In 1802 the newly-established Board of Agriculture arranged a series of lectures on *The Connection of Chemistry with Vegetable Physiology*, to be delivered by Davy, then a young Assistant-Professor of Chemistry at the Royal Institution of Great Britain. The fame of Davy's lectures was spectacular. For the next ten years he repeated them, and in 1813 he published his *Elements of Agricultural Chemistry*. This, says Ernle,

> "is the foundation stone on which the science of agricultural chemistry has been reared, and its author was the direct ancestor of Liebig, Lawes and Gilbert, to whose labours, in the field which Davy first explored, modern agriculture is at every turn so deeply indebted"

Interest in the application of chemistry to food production was in the ascendant The Royal Agricultural Society took as its motto, "Practice with Science." Two years after its foundation in 1838, Justus von Liebig published

Organic Chemistry in its Application to Agriculture and Physiology This epoch-making book traced the relation between food needs of plants and soil composition. By laboratory experiments Liebig clarified our knowledge of what chemicals plants take from the soil, and hence of what fertilizers can supply their essential needs The publication of Liebig's book aroused tremendous interest, and two men are outstanding among those who carried his work a stage further. One was Lawes, a young landowner, the other Gilbert, one of Liebig's pupils New knowledge of plant nutrition paved the way for the production of artificial fertilizers, to restore what plants take from the soil. Lawes established a factory of this kind at Deptford in 1842 The foundations of the famous experimental farm at Rothamstead were laid in the same year

This was the beginning, but only the beginning, of a new phase in the history of farming. Increased knowledge of plant food pointed the way to the use of artificial fertilizers. Soon bone dust, superphosphates and Peruvian guano were in use. By the seventies imports of guano, which had been coming in at the rate of about 300,000 tons per annum, began to fall rapidly. By 1887 they were negligible. Recognition of other plant needs eclipsed demand for nitrates By the late seventies superphosphates of lime had become "the most largely used artificial manure."

Change of farming practice also created a demand for improved implements. There had been some improvements in ploughs and harrows during the eighteenth century. In 1786 Andrew Meikle, the millwright of Dunbar, erected the first satisfactory threshing machine at Kilbogie in Clackmannan By 1800 there were such machines on the best farms in the Lothians. Before 1830 they were common in Scotland and spreading in England When Cobbett visited Scotland in 1832, the farms of the Lothians were large capitalist undertakings, worked by landless labourers He calls them "steam-engine farms" "The farmyards are in fact factories for making corn and meat." Between 1837 and 1874 there had been improvement of every conceivable agricultural implement Many new ones were available—reaping machines, ploughs and harrows for different kinds of soil, seed drills to sow the seeds at the correct depth and in straight lines, rollers, manure drills to distribute the new fertilizers Agricultural engineering was now an important industry.

THE GOLDEN AGE OF FARMING

The years between 1840 and 1870 were a golden age for British farming. New railways linked the countryside to growing towns. The market for agricultural produce expanded Consumers and farmers came into closer contact with one another In fact, the repeal of the Corn Laws in 1846 did not bring immediate disaster as many predicted. On the contrary, farming prospered. An expanding home market was not yet affected by foreign or colonial producers. To the demand for wheat was added the demand for meat and dairy produce

During the period of prosperity there was gradual concentration of landed property. By 1825 the main work of enclosure was over. Open field and run

rig were rare. There was still much unenclosed moor and hill country, but this succumbed rapidly after the General Enclosure Act of 1845. Even where open field survived, the old communal method of working had gone. Each individual managed his own strips in his own way, as they still do in the open fields of Axholme.

The General Enclosure Act of 1845 decreed that a "certain proportion of the commons should be set aside for allotment and recreation." Subsequent statutes (1876–99) strengthened this provision. By then the damage done was irreparable. According to an inconclusive general inquiry, which contemporaries called *The New Domesday Book*, about one-half of the United Kingdom was owned in 1873 by 7,400 people, but these 7,400 included duplicate entries. For example, the Duke of Buccleuch counted as fourteen, because he held land in fourteen counties. It was pointed out further, says Clapham (*An Economic History of Modern Britain*, 1932, 253), that the other half of the United Kingdom "was connected as much with suburban freehold plots as with the properties of lesser gentlemen and yeomen."

The social prestige and political influence of landed property were ever an inducement to the successful business man to purchase an estate, have his son educated at a "public school" and rounded off at Oxford or Cambridge Thus the landowning class was constantly drawing to itself fresh blood from the business and manufacturing class. However, the owner-farmer did not entirely disappear. According to a return to the Board of Agriculture, there were 66,700 of them cultivating 14 per cent of the total property in 1896. The number increased during and after the First World War, when many purchased their farms through choice or compulsion Most of these owner-farmers were owners by courtesy. Like that of the fishermen-owners of the Scottish drifters, their property was heavily mortgaged.

While most landed proprietors had their home farm, nearly all the rest of the land was let to tenant farmers, who might or might not employ labourers According to the Census of 1851, about 42 per cent of farmers in Great Britain employed no regular hired labour. At that time their number was declining slowly The large farm was gradually dominating the rural scene. Considerably more than one-third of the farmed land of England and Wales was laid out in farms of from 200 to 500 acres, and almost another sixth in farms of 500 acres and upwards Owners of such farms belonged to a higher social class than the small tenants. The gentleman-farmer, says Heaton, was "a valuable minor pillar of church and Conservative Party." The small English farmer of under 100 acres occupied considerably less than a quarter of farm lands A similar estimate is roughly true for Scotland, where gentlemen farmers were rare

Factories were fast destroying rural crafts The large farms employed labourers who were wage-earners, without rights to common and without supplementary sources of income Spinning, which had been for centuries a source of income to country women, had now passed into the power-driven factories Wages varied from county to county, but everywhere at a low level. In many counties where labour was scarce the *gang system* predominated Men, women and children worked for a tyrannical gang master under disgraceful conditions. To landlords who supported factory laws, industrialists

could well retort that there was ample room for improvement on the land. Eventually the State did bring the gang system under control (1868).

In Scotland gangs operated, and still operate, at busy times such as at potato-lifting Otherwise farmers solved the labour problem to their own satisfaction by the *bothy* system, which Cobbett found fully developed in the Lothians as early as 1832. For regular, as well as for gang labour, hours were long and conditions were miserable. Houses of labourers were usually poor hovels, offering little protection from rain and wind, and giving the most wretched accommodation to the inmates English villages, which arouse the sentimental interest of the tourist, were plague-infested places with refuse heaps at the door, where stagnant pools made breeding-grounds for malaria. Typhus and other epidemics were still common. In fact, the drainage of arable and pasture land got far more attention than that of the villages themselves. Chadwick's *Report on the Sanitary Condition of the Labouring Population* (1842) made the most astonishing revelations of the conditions under which labouring people lived. In the parish of Flitwick, where typhus had broken out, the medical officer reported:

> "The cottages in which it first appeared (and to which it has been almost exclusively confined), are of the most wretched description a stagnant pond is in the immediate vicinity, and none of the tenements have drains, rubbish is thrown within a few yards of the dwellings, and there is no doubt but in damp and foggy weather, and also during the heat of summer, the exhalations arising from those heaps of filth must generate disease, and the obnoxious effluvia tends to spread contagion where it already exists. It appears that most of the cottages alluded to were erected for election purposes, and have since been allowed to decay."

Though agriculture was more prosperous than it had ever been, conditions were no better in the middle of the sixties Orwin's summing up of an earlier period may well be applied to the nineteenth century:

> "British agriculture," he says, "gave returns sufficient to reward adequately all the parties to production. It was the maldistribution of profits, rather than any lack of them, which led to the change for the worse in the lot of so many of the labouring class."

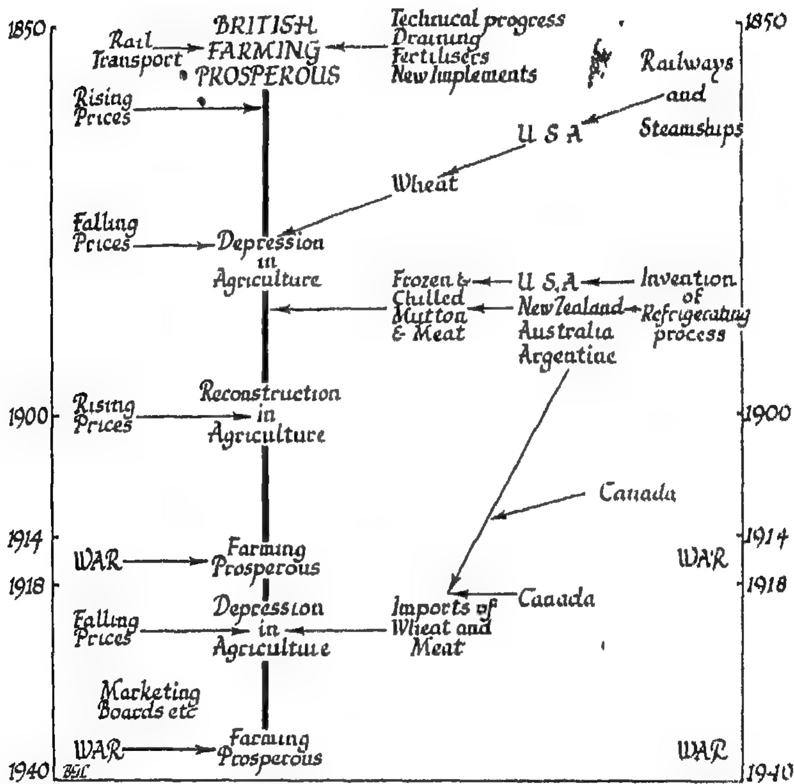
AGRICULTURAL DEPRESSION

Despite increasing importation of wheat from abroad, agriculture was a flourishing industry till about 1870. Rising prices at home and increased demands of the towns for dairy produce, kept the farmer in good spirits. While those prepared to take a long view could anticipate depression and perhaps disaster, most people imagined that prosperity had come to stay. When the crash came in the seventies, they were bewildered alike by its causes and by its probable outcome

Several circumstances contributed to the change. One was a great fall in prices which began about 1873 In the previous quarter century prices had been rising because of an influx of gold from California and Australia. By the early seventies a fall of gold output coincided with increased demand

from countries which were adopting the gold standard. Prices ceased to rise. Thereafter they tumbled until the next gold boom—the Klondyke, South Africa and Western Australia—in the nineties.

A second relevant circumstance was a run of bad harvests which brought ruin to farmers. A third, and also important one, was the new transport Railways and steamers were annihilating distance and cutting down freights. Steam traffic was opening up the vast prairies of the United States, which were pouring their wheat into the eastern seaports Steel steamers were



TIME CHART 3· THE UPS AND DOWNS OF BRITISH FARMING

fighting for freights. As transport costs fell, wheat imports increased by leaps and bounds. From 1861 to 1870 American wheat accounted for only 30 per cent of British imports. In 1881 the figure had risen to 65 per cent. The railroads, the steel plough, the binder, the free homestead, the elevator, organized marketing—all these contributed to the same end. American production rose from 425m bushels in 1876–85 to 632m bushels in 1896–1900 and to 700m bushels in 1901–5 During the eighties Canada made itself felt, in the nineties the Argentine, and to some extent, Australia. Within Europe Russia was becoming an important wheat-exporting area.

Competition of the new producers and the creation of a world market

brought depression to Britain, and indeed to European agriculture. It lasted for some twenty years. Wheat prices fell continuously, and with them prices of meat and dairy produce, farming profits and farm rents, also fell. This state of affairs was satisfactory to consumers who were getting cheap food, and to investors who were getting a handsome return on the capital pouring overseas. At the beginning of the twentieth century Britain did not produce more than a tenth of her consumption. The area under wheat cultivation dropped from 3,630,000 acres in 1874 to 1,845,000 in 1900. "In 1907 it was estimated," says Heaton:

"that 20,000,000 acres of land abroad were growing wheat for the British market for British consumers, and that another 20,000,000 acres were supplying Britain with half its meats and much of its dairy produce. One-quarter of all the wheat, corn, barley, and oats that entered international trade went to Britain, as did virtually all the bacon, mutton and lamb Most of the exports of Australian, New Zealand and Canadian farm produce went there, along with 95 per cent of Denmark's butter and the larger part of the Argentine's beef and of Ireland's butter and bacon The country produced about £170,000,000 worth of the foodstuffs it needed, and imported about £200,000,000 worth from the temperate zones."

RECONSTRUCTION

Before the end of the century the skies began to brighten The drift of prices was once more upwards. Farmers had learned from their losses during the Depression. They paid more attention to fertilizers and to stock-breeding They adjusted methods to new circumstances. Since it was useless to compete with overseas producers of wheat, they turned their attention more and more to perishable products, the home market of which they still had a virtual monopoly. They produced meat, butter, eggs, fruit and vegetables.

Even so they could not wholly escape competition. Refrigeration was making it possible to ship meat and butter from the Argentine and Australia. Before the outbreak of the World War in 1914 Britain's dependence on foreign countries for the bulk of its food supply was recognized by most people as inevitable With the war came a big drop of imports Between 1913 and 1918 imported wheat went down by one-fifth, beef by one-third, mutton and butter by one-half, and eggs by three-quarters. To combat scarcity farmers were urged to grow more wheat. The margin of cultivation was pushed back, to recede once more when hostilities ceased Shortly after the end, war-time state control of farming was abolished.

In the slump of 1920 prices of agricultural produce fell with those of manufactured goods. Between 1920 and 1923 the drop was 50 per cent. After a slight recovery, a headlong fall continued until 1931. Meantime land went back to grass, and many farmers who had been virtually compelled to buy their farms when prices were good, saw bankruptcy stare them in the face Demand for protection became more insistent. When the crash came in 1931, manufacturers and farmers were of one accord. Protection won the day, and Great Britain reversed a fiscal policy which had lasted for eighty years.

Of late years the difficulties of farmers have been mitigated by changes of demand. Urbanization has increased consumption of light and easily-assimilated foods New knowledge of nutrition has diverted consumption from cereals and energy foods to protective foods, like eggs, butter, milk, fruit and vegetables None the less, the British farmer has fought a series of rearguard actions ever since the eighties—always falling back in face of increased foreign competition to products sheltered from competition. The following table (Viscount Astor and B. Seebohm Rowntree, *British Agriculture*, 1939, p. 70) illustrates how one import after another came to harass the British farmer:

ANNUAL AVERAGE NET IMPORTS INTO THE UNITED KINGDOM

(*Thousand cwts.*)

	Sugar	Wheat and Wheat Flour	All grain and Meal excl Wheat	Meat	Butter	Cheese
1861–65	11,814	34,652	25,585	1,553	1,031	771
1871–75	16,943	50,495	47,067	3,131	1,368	1,349
1891–95	28,288	96,583	78,475	10,437	2,409	2,150
1911–13	37,201	119,666	91,027	21,500	4,148	2,360
1925–29	36,200	109,500	69,472	31,043	6,000	3,020
1932–36	28,996	112,702	91,043	30,902	8,381	2,885

THE PROSPECTS OF FARMING

In what has gone before we have traced the varying fortunes of farm industry and of those engaged in it in relation to the exigencies of private profit. The story of the land would be incomplete without reference to other topics. The Enclosure Movement illustrates how men of property can manipulate the machinery of the State for personal gain, but there is more to be said about the role of government in agricultural industry. Since the foundation of the Board of Agriculture in the closing years of the eighteenth century, government has borne a large burden of the costs of research which has contributed to the prosperity of farmers and landowners. It has also been responsible for the organization and upkeep of educational institutions, of analysts, inspectors and advisers to promote diffusion and application of new knowledge in large measure the outcome of state-subsidized research In short, the scope of "interference" which has helped the farmer to accommodate himself more or less successfully to foreign competition and to the favour of the market has been far more extensive than the scope of intervention directed towards the welfare of the farm worker For a century the nation nursed the application of science to agricultural industry while arable land and the instruments of agricultural production have remained in private hands.

Land is a prerequisite of shelter as well as of food, but food and shelter alone do not exhaust its human interest The relation of human beings to the land has another aspect which is relevant to any forecast of the future in store

for the countryside. The prevailing pattern of human recreations depends on the distribution of population between town and country. What facilities of recreation the countryside offers depend on climate, on geological structure and on scenery. The latter is not an exclusively natural amenity. To a large extent the character of British scenery is a by-product of agricultural prosperity It is the creation of estate-owners and gentlemen-farmers who have protected areas for hunting, planted trees for timber and laid out parks for pleasure More lately, State afforestation enterprise has taken a hand in the perennial reshaping of the countryside by human interference.

Refrigeration has dealt individualistic farming a blow from which it is not likely to recover in times of peace. Within the framework of private enterprise there is no immediate prospect of arresting a decline of British agriculture unless exhaustion of industry through war forces the country to drastic redistribution of its productive activities. To some extent the forces which are inimical to the stability of British agriculture would also operate in a planned economy. For beyond a point agricultural industry is an unprofitable investment from a social, as well as from an individual, viewpoint. Agriculture is essentially a way of capitalizing solar energy. The outstanding natural conditions, other than available sunlight, are water and phosphates. Irrigation is opening up large tracts of the earth's surface for husbandry and the need for conserving soil phosphates is universal. In other words natural inequalities of available sunlight set an inescapable limit to the return for a given amount of human effort. At present, diffusion of technical knowledge sets another limit. While this is so, countries with less favourable natural advantages may enjoy the benefits of superior technique, but universal education would deprive them of the latter.

From this point of view it looks as if agriculture is bound to become more specialized and more localized, but we have to take into account another possibility. What return we get for unit expenditure of human effort need not be the only criterion of choice in a planned society. With the use of modern technical amenities it would be possible to extend the scope of domestic food production as a *hobby* without great waste of effort. It is therefore easy to foresee the possibility of a growing demand for more local small-scale cultivation of perishable products, such as salads, while new knowledge of nutrition is likely to promote increased consumption of milk. For a long time to come there will be dairy farming and probably fodder crops. For a long time to come there will be scope for poultry farming; but Britain is likely to rely less on its own production of such specialized crops as cereals or upon home-grown meat. How far the scope of domestic production can expand depends on a natural policy of housing, town-planning and localization of industry, perhaps also on advancing scientific understanding of recreation in the most literal sense of the term.

Long-range speculations about the future of the land have to take stock of technical possibilities which are emerging from contemporary discoveries. One such is tank-gardening or water culture. Conceivable developments along this line might eclipse any advances since the Neolithic, and they do not exhaust our powers of imagination. Equally conceivable, if less immediate, is a technical revolution along other lines. Human beings prefer

food prepared from particular species of animals or plants because of its flavour or texture. Agricultural science has hitherto taken the existence of such for granted. Deeper knowledge of nutrition and heredity has brought about greater specialization, and parasitological research has taught us how to protect crops and stock from pest or parasite. In short, our application of science to date has relied on nature to supply the inherent *quality* of the materials, and this limits the scope of effective production for *quantity*

It would be unduly conservative to assume that we shall always act in this way. If we lay aside traditional preferences and look at the problem of food production from a technical point of view, it amounts to this Producing food with the minimum of effort is making in bulk, with as little human work as possible, certain energy-giving organic compounds (proteins, carbohydrates and fats) of a certain texture, and supplying, with as little effort as possible, other organic substances such as vitamins and flavours. Organic chemists can already solve the problem of supplying the flavours and vitamins by synthesis from whatever raw materials are most available. Plastic technology is overcoming the difficulties of conferring a prescribed texture on a lump of organic material; and the production of the latter offers a host of alternatives which involve vastly less expenditure of time, effort and raw materials than specialized agriculture.

For instance, sawdust or even any weed is a source of cellulose available for conversion into sugar. The emergence of an effective demand from the manufacture of ice-creams and fruit-jellies might well nurse the technology of synthetic flavours to the status of an industry which could explore further possibilities of food production for *quantity per se*, and encourage experiment on methods of food production with no parallel in the past history of mankind. Drastic changes of this kind would come up against the traditional conservatism of human food habits, and our next theme will be how food habits change.

CHAPTER III

FOOD AND THE PEOPLE

> "A good cook is half a physician. For the chief physic (the counsil of a physician except) doth come from the kitchen; wherefore the physician and the cook for sick men must consult together"
>
> (ANDREW BOORDE, *A Dyetary of Helth*, 1542)

SINCE the beginnings of human life man has worked and fought to get food. The quest for food has driven families across continents and oceans. Our first two chapters have dealt with the use of land as the basic source of food; but the full story of the conquest of hunger is more than the record of social relations and technical advances which have influenced the productivity of the soil Human preferences are not an infallible guide to a regimen of health; and the circumstances that shape them are therefore relevant to the health level of a community. As such they contribute to its chances of survival So the record of man's quest for food would be incomplete if we took no stock of the quality and kinds of foods available at different social levels at different periods in the past

In medieval times the connexion between the work of the people and their daily bread was very close With few exceptions everyone held a piece of land, as owner or lessee or by some vague, unwritten custom Though some of the produce was marketed in the rising towns, the bulk was consumed by the cultivators themselves Even kings and lords derived most of their food direct from their own estates, and it was common for them to pass from one manor to another, literally eating up the produce. When Alexander III of Scotland and his Queen held Court at the Castle of Forfar for twenty-nine weeks in the summer of 1263,

> "the supplies consumed during that sojourn included 48 beeves, 25 swine from adjacent forests, 30 sheep brought from Barry, and 40 from the Grange of Strahylif (now Glenisla), 60 stone of cheese, 311 fowls, 17 chalders, 1½ bolls of malt, 3 chalders, 2 bolls of barley, and 38 chalders, 8 bolls of fodder, and there was also a special provision of barley and fodder, though not of malt, for the Queen's use" The lake of Cluny yielded 700 eels for the King's use, and ninescore for the Queen's (Exchequer Rolls, 1264–1359, i, 1, lii)

When the lives of king and lords were so closely linked to the produce of the soil, how much more so were those of the ordinary folk for whom a bad harvest spelt starvation and disease? Let us make an inventory of the raw materials.

The chief crops grown in England were barley, rye, wheat, pease, beans and vetches Rye was the chief breadstuff, but in Kent, and on many of the lords' home farms in different parts of the country, wheat, or a mixture of wheat and rye called maslin, was used (See Sir William Ashley, *The Bread of our Forefathers*, 1928.) The coarse wholemeal breads were usually baked at home by the people themselves, and this remained the general custom

in England down to quite recent time. "How wasteful," says William Cobbett in his *Cottage Economy* (1821), "and indeed how shameful for a labourer's wife to go to the baker's shop; and how negligent, how criminally careless of the welfare of his family must the labourer be who permits so scandalous a use of the proceeds of his labour." Sometimes the lord had his oven, to which the tenants were compelled to bring their dough to be made into bread, and even in the towns it was not the general custom to buy bread from the bakers Customers paid for the use of the oven, themselves providing the material Thus the baker was in a strong position to practise fraud on his clients This explains why people were vastly distrustful of them.

In addition to *rye* and *wheat*, which constituted the breadstuff, there was *barley*, which was the chief drink crop. In the England of the Middle Ages, ale was the common beverage, as likewise in Scotland, but wine also was generally consumed by all except the poorer classes.*

The peasant kept pigs, poultry, sheep, and *generally* a cow, and these added their quota to his table There were thus small supplies of *white* meats, that is milk, butter and cheese, during summer time. Bacon, salted and smoked, and perhaps an occasional rabbit, provided the chief meat, when the peasant was able to elude the eye of the lord's keeper. The upper classes had usually plenty of fresh meat in summer time. There were beef, mutton, veal, pork, venison and game of all sorts Owing to the scarcity of winter fodder, it was the custom to kill off large numbers of cattle at Martinmas These, when salted, smoked or dried, supplied the larder in winter time. On November 20, 1461, for instance, the bailiff to the Paston family in Norfolk reported that he had laid in sufficient beef for the household till Fastegang (Lent). (*Paston Letters*, ii, 70)

Fish, fresh or salted, was a common article of diet in Roman Catholic times Herring from Ireland and Yarmouth, codfish and ling from Iceland were most in demand among all classes. In the Household Ordinances of the Earl of Northumberland (1512) we learn that for breakfast my lord and lady were served on fast days with "ii peces of salt fysche, vi baconn'd (baked) herryng, iiii white (pickled) herryng or dysche of sproits (sprats)," with bread, butter and beer. The younger folk in the nursery breakfasted on "a manchet, a quart of bere, a dysche of butter, a pece of saltfish, a dysche of sproittes, or iii white herryng" (quoted J. C. Drummond and Anne Wilbraham, *The Englishman's Food*, 1939, 69–70)

HERBS AND GREEN FOOD

In the centuries following the Norman Conquest, the monks were pioneers of gardening. For them a garden was a necessary adjunct to the monastery, supplying its inmates with vegetables and herbs for physic as well as for the table. Onions, leeks, cabbage, garlic, predominated, but there were many other plants. Roses, lilies, violets, hawthorn and primroses, none of which one would nowadays find in a kitchen garden, had their uses for the table. "Flowers of Violets" were eaten raw with onions and lettuce or sometimes

* *English Trade in the Fifteenth Century*, ed Power and Postan, 1933, 266–7.

used in broth along with fennel and curry. In the *Dyetary of Helth* (1542), almond-butter and violets is recommended by Dr. Andrew Boorde (267):

"Almon-butter made with fyne suger and good rose-water, and eaten with the flowers of many vyoletes, is a commendable dysshe, specyallye in Lent, whan the vyoletes be fragrant, it rejoyseth the herte, it doth comforte the brayne, & doth qualyfye the heate of the lyuer"

The orchard was another important adjunct of the monastery, though at first it was not necessarily separated from the ordinary garden. It supplied apples and pears, chiefly for cooking and making cider. Many monasteries also had their cherry-yard and their vineyard. Ely, for instance, was long famous for its grapes.

Influenced by the example of the monks, the feudal aristocracy took up gardening. Owing to unsettled political conditions, it was more difficult for them to develop the art. The lay-out of the early baronial castle did not admit of much space for a garden; nor did recurrent warfare encourage expenditure of time and money on growing plants and trees which were so easy to destroy. By the end of the fourteenth century, in spite of this, every manor house had its garden, providing it with apples and pears and the usual vegetables. By then London, too, had its vegetable market "opposite to the Church of St Austin near the gate of St. Paul's Churchyard," whither came the gardeners of earls, barons, bishops and citizens to sell "their pulse, cherries, vegetables and other wares to their trade pertaining." The peasantry usually had small patches of ground around their houses where they grew cabbages and kale, onions and leeks. They also gathered wild herbs on the waste and common lands, like Chaucer's poor Grisildis

"And whan she hoomward cam, she wolde bringe
Wortes or othere herbes tymes ofte
The whiche she shredde and seeth for hir livinge."

THE STANDARD OF LIVING

The diet of the ordinary peasantry was monotonous enough. Black bread made of barley or rye was the chief food, but sometimes maslin, a mixture of wheat and rye, or rye and barley, was used. In Scotland oat cakes took the place of bread. Chaucer's *poor widow* in *The Nonne Preestes Tale* ate

"Milk and broun bread, in which she fond no lak
Seynd bacoun and somtyme an ey (*egg*) or tweye"

It is unlikely that there was an abundance of milk or milk products, and certainly no continuous supply throughout the year. Gower, who lamented the "uppishness" of the peasantry in the fourteenth century, says, "Labourers of old time were not wont to eat of wheaten bread their meat was of beans or coarser corn, and their drink of water alone Cheese and milk were a feast to them" Wholemeal bread, ale, broths of beans and cabbage and flavoured with onions or wild herbs, a little bacon, some milk, cheese, eggs and poultry were probably the chief items in their dietary. At Lent and on fish days they ate salted herrings, cod or ling.

According to modern dietetic standards, this diet had two outstanding deficiencies. In the first place, there was a great scarcity of milk, butter and cheese, which along with vegetables are the chief source of vitamins A and D. Especially during winter time, when there was no green food or milk, or only milk from cows fed on straw or hay so that it was D-deficient, the intake of these important vitamins must have been entirely inadequate. The practical importance of this is that resistance to infection was low. As we might expect, the incidence of plague and other diseases rose sharply after each period of dearth and scarcity of food. One has but to recall what happened during and after the World War of 1914–18 to realize the significance of this fact.

Other evidence of malnutrition in the Middle Ages is found in numerous references to stone in the bladder or kidney and to eye diseases, among which night blindness and xerophthalmia are now known to be due to deficiency of vitamin A. Medieval diet was also deficient in vitamin C (ascorbic acid) which is found in fresh fruit and vegetables. Little fruit was eaten. Indeed, it was rejected as supposedly dangerous to health and liable to cause "putrid fevers," while vegetables, when used, were usually cooked with soups and meat. The prevalence of scurvy was the inevitable consequence. Says Professor Drummond:

"The whole population, rich and poor, must have existed, from year to year, in a state of chronic under-nutrition with respect to this vitamin. Naturally, their condition was worse; that is, there was greatest danger of recognizable scurvy appearing at the end of the winter, but it improved during the summer months. There is, however, no escaping the conclusion that most of the people passed a large part of their lives in a pre-scorbutic condition."
(Royal Society of Arts, Cantor Lectures, 1938, 12.)

What was true of medieval Britain has its parallel in conditions prevailing to-day in Iceland, northern Norway and Finland, where diet is also deficient in vitamin C. The result at the end of the long winter is that the people are on the verge of scurvy. Only the reappearance of spring with fresh supplies of green food checks the ravages of the disease.

Besides such deficiencies of diet as caused scurvy, checked growth and lowered resistance to infection from plague, there was ever the dread spectre of famine. In times of dearth some food was brought from abroad; but each village had to depend largely on its own resources. When the crops failed, large numbers of the people had to face slow starvation. The upper classes naturally fared much better than the ordinary peasantry. Generally, they had wheaten bread, though that was not of greater dietetic value than rye or barley bread. They had more fresh meat, they had fowls such as poultry, geese, cranes, herons, curlews, and they had their gardens of parsley, lettuce, cabbage, onions, garlic, violets, roses and other herbs. Cookery books of the fifteenth century give some idea of the kind of food they ate. They did not serve vegetables separately; instead, every vegetable or herb was used to *flavour* dishes. Parsley and onions and fennel were very common. Saffron, grown extensively in the eastern counties, was used in astonishing quantities. Fowls were stuffed with such herbs. Mutton and beef, pork and fowl were

extravagantly seasoned Here is a recipe of the fifteenth century (*Cookery Book*, c. 1450, Early Eng. Text Soc., 72):

"*Stewed Mutton* Take faire Mutton that hath ben roste, or elles Capons, or suche other flessh, and mynce it faire; put hit into a possenet, or elles bitwen ii siluer disshes, caste thereto parcely, And Oyons small mynced, then caste there-to wyn, and a litull vynegre or vergeous, pouder of peper, Canel, Salt and saffron, and lete it stue on the faire coles, And then serue hit forthe, if he have no wyne ne vynegre, take Ale, Mustard, and A quantite of vergous, and do this in the stede of vyne or vinegre."

Like the "lower orders," the wealthy also suffered from C-deficiency. So scurvy or pre-scorbutic conditions must have been comparatively common among the well-to-do. The fact that they despised "white meats," as poor man's food, exposed them also to the effects of a diet deficient in A and D.

In spite of lavish use of garden herbs and plants from the common lands, foreign spices, such as pepper, cloves and cinnamon were in great demand. The "Martylmas beef" which hung in the roof of the "smoky house" could not have been particularly appetizing without recourse to pungent sauces made with spices and vinegar. One has only to glance through menus or cookery books of the fifteenth and sixteenth centuries to realize what an important part spices played. Almonds, pepper, cinnamon, cloves, galinagle and ginger are found in astonishing quantities in all meat dishes.

"Sauces provoke a fine appetite. Have ready Mustard for brawn, beef or powdred mutton, Verjuice for veal, chicken or bacon, Chawdon for cygnet and swan, Garlic, vinegar or pepper for beef and goose, Ginger for lamb, kid, pig or fawn, Mustard and sugar for pheasant, partrich or cony. . . ." (John Russell in the *Boke of Nurture*, ed Furnivall, Early Eng. Text Soc., 152).

FOREIGN TRADE AND FOOD

This is why *spices* were so important as merchandise. Foreign trade is one of the chief social agencies that have changed the character of diet. In medieval times spices were brought from the Mediterranean and the Far East, and they were the first important class of commodities imported over great distances. Purchased from the eastern traders in the Levant, they were brought by Venetian merchants to Italy. Thence they passed overland to Bruges, or were transported by sea direct to England and the Low Countries. One of the earliest groups of London merchants was concerned in this trade. In Scotland the merchants of the Royal Burghs, who had the monopoly of foreign trade, shipped such goods from the Low Countries. The importance of the traffic is shown in the *Account Book* of Andrew Halyburton, who was agent for the Scots merchants at Middelburg. Here is an item dated 1495:

"Item in Januar next ther efter, past and bocht in Handwarp and packit in a pyp and schepit in the Julyane, in the first roll of canvass, cost 7s. 6d. Item a stek of ryssyllis (cloth) bron, cost 9l. Item 4 dossin of pepper, cost 19s the dossin. Item 2 dossin gyngar, cost 17s. the dss. Item a Li saferon, cost 10s. Item 50 li almondis, cost 16s. Item 50 ryis, cost 6s. 6d., 4 li clois, cost 3s. the

li; 4 li mass, cost 4s. the li. Item 2 li. canell cost 4s. 8d. the li. Item 12 li scrozatis (confections) cost 5s Item a li. sandry (sandalwood) cost 12d Item a li trousall, cost 12d. Som of the spis 9 li 14s. 10d. . . . Item bocht in Handwarp at that samyn tym, and laid in the samyn schip, a kist off sucur, cost, 3½d. the li" (p 198).

The lavish use of spices brought from the Levant and the Far East was designed to make the winter diet of medieval times more appetizing. They did not necessarily bring about any radical change in the food habits of the people. What did so about the same time—the end of the Middle Ages—was the importation of *sugar*. Hitherto honey had been the sole sweetening agency, and it was used by the generality of men for long after importation began, while sugar was still extremely precious and expensive. Until the discovery of America the main sources were Alexandria, Cyprus and Madeira, from whence increasing quantities came in the fifteenth century. For example, sugar occurs for the first time as an import to Bristol in the reign of Henry VI. In 1479 one ship brought no less than 200 cwt. Almost every cargo dispatched by Andrew Halyburton from the Netherlands to Scotland contained sugar. In January 1496 he sent a "kyst succur," weighing 102 lb., and costing £3. 4s. 4d ; in November, 248lb., and so on. Some of the sugar thus imported was used by the apothecaries in the dispensing of medicines, but the Cookery Books of the fifteenth century already referred to show that it was a frequent ingredient in food, at least in wealthy households.

SCURVY

The discovery of the sea route to the Far East and to America marks the beginning of a new era in the history of the world. So far as food is concerned, two interesting facts call for notice. One is that the new sea roads involved longer voyages than had ever been undertaken before. This raised the very vital problem of how to get enough fresh food for health The other is that supplies of spices and sugar increased vastly, and new commodities, such as tea and coffee, were introduced into the diet of Englishmen and Scotsmen.

On these long voyages, the great enemy of the sailor was scurvy, a disease due, as we have seen, to lack of vitamin C or ascorbic acid, present in fresh fruit and many vegetables, especially oranges, lemons, black currants, green leaves and potatoes. The first English experience of the dread disease was on early voyages to the African Gold Coast, about the middle of the sixteenth century. This was followed in 1562–7 by John Hawkins' slave-plundering trips. In his voyage to the Spanish Main both seamen and slaves suffered cruelly from scurvy.

"If all the miseries and troublesome affairs of this sorrowful voyage should be perfectly and thoroughly written," says Hawkins himself, "there should need a *painful* man with his pen, and as great a time as he had that wrote the lives and deaths of the martyrs"

In subsequent voyages the disease caused great ravishes amongst his men and "passengers." In an account written of his 1593 voyage, Richard

Hawkins, only son of John Hawkins, shows a surprising understanding of the nature of scurvy and the best way to deal with it.

"That which I have seen most fruitful for this sickness is sour oranges and lemons," he writes. "It is the great and unknown virtue of that fruit," he adds, "to be a certain remedy for this infirmity."

Two hundred years later the Admiralty ordered a supply of lemons in all ships of the British Navy, and "limie" became a synonym for the British bluejacket. Meantime, deaths from scurvy continued, especially after 1600 when regular voyages to India were established by the East India Company. In 1607 the minutes of the Court of Governors record that "lemon water" was to be provided with expedition, and in 1612 John Woodall, surgeon to St. Bartholomew's Hospital and surgeon-general to the Company, published the first scientific account of what Hawkins had called "the plague of the sea and the spoil of mariners." He urged ships' surgeons to lay in supplies of fresh lemons and oranges wherever obtainable. Though the curative action of these anti-scorbutic fruits was known, early writings give no hint that the cause of the disease is *lack* of fresh vegetables or fruit.

Scurvy was still a widespread disease in the eighteenth century Dr. Lind, famous for his *Treatise on Scurvy*, records that in the two years, 1758–60, there were no less than 1,146 scurvy cases out of a total of 5,743 in the Haslar Hospital near Portsmouth. These were Royal Navy cases How much worse must have been the state of affairs in the mercantile marine where seamen were "destitute of proper advice and assistance, and even of such necessaries as might afford a present momentary relief, and render his affliction more tolerable." (James Lind, *An Essay on the Health of Seamen*, 1762, 125, 141.) Drawing on his own and others' experience Lind urged the necessity for supplying war vessels with fresh vegetables and especially lemons and oranges.

One of the first to take his advice was Captain Cook. In his great voyage of discovery to the Antipodes, lasting for upwards of three years, he lost only one of his 118 men. On his return he communicated a paper on his Method to the Royal Society. For it he was awarded the Copley Medal in 1776 Not until 1795, two hundred years after its value had been proved on the long voyage to India, did the Admiralty issue their famous order that all ships of war should have a supply of lemon juice. Thereafter, scurvy practically disappeared from the Royal Navy

During the nineteenth century, there was still much scurvy in the mercantile marine Some ships carried anti-scorbutics, but most did not. Deaths from scurvy on the convict ships that sailed to Van Diemen's Land were appalling. It was not until 1854 that the Merchant Shipping Act decreed that all long-distance ships should carry anti-scorbutics. Lemons or lime juice were suggested, but sugar or vinegar were mentioned as substitutes; another forty years passed before more explicit directions were given. The suggested ration of lemon or lime juice was fixed at one ounce a day, which was entirely inadequate. "Such doses were probably just sufficient," says Professor Drummond, "to prevent the appearance of recognizable scurvy." A recent Act of 1927 recommends a more satisfactory ration.

POPULATION, CAPITALISM AND FOOD

Growth of population and the rapid rise of prices in the sixteenth and seventeenth centuries had two general consequences, so far as the history of food is concerned. In the first place, they stimulated interest in agriculture, especially in market gardening and dairy farming in and around London. They also created difficult conditions for the poor.

Elizabethan writers remark on the new prominence given to the garden and to the increased consumption of vegetables. In and around London, market gardening was already so important as to rank as a craft. Its members were incorporated as the Master, Wardens, Assistant and Comynaltie of the Companie of Gardiners of London. Herbs and plants of all kinds were still valued for their medicinal properties, but the chief use of vegetables and even of some flowering plants was the kitchen pot or the salad bowl. Salad herbs were numerous—onions, leeks, garlic, turnip tops, water-cress, dandelion, lemons, lettuces of the garden, wild lettuces, beet, spinach, dock leaves, sorrel, hops, leaves of musk-roses, rosemary, etc. Some writers, misled by the doctors, says Cooper (*The English Table in History and Literature*, London, N D , 67), advocated the "byling of salads, as better for digestion," but others knew better.

> "Salad," says Evelyn in 1706 (*Acetaria, a Discourse of Sallets*, 173), "is a Particular Composition of certain crude and flesh Herbs, such as usually are or may be eaten with some acetuous Juice, Oyl, Salt, etc., to give them a grateful gust and vehicle. . . In the composure of a Sallet, every plant should come in to bear its part, without being overpowered by some herb of a Stronger Taste, so as to endanger the native Sapor and vertue of the rest; but fall into their places like the notes in music, in which there should be nothing harsh or grating; altho' admitting some Discords (to distinguish and illustrate the rest) striking in the more sprightly and sometimes gentler Notes, reconcile all dissonancies and melt them into an agreeable compotion. . . . The very same that Diabesseron, Diapente and Diapason have to another in a Concert of Music."

Before Elizabeth's death, turnips and possibly potatoes were grown in some gardens. They were rare delicacies. These roots were later to revolutionize the diet of man and beast. Meanwhile, such fruits as apples, apricots, as also hops, were being more generally grown. Strawberries were eaten in the modern style. Says a seventeenth-century enthusiast, "The Berries in sommer time, eaten with creame and sugar, is accounted a great refreshing to men, but more commended, being eaten with wine and sugar" (Amherst, *A History of Gardening in England*, 1896, 143). In the gardens of the peasantry, beans still occupied pride of place.

The chief reasons for the great development of vegetable gardening in Elizabethan and Stuart times were growth of population and the development of the London market to which reference has already been made (see pp. 34–35). Its progress was nourished by the influx of Flemings, many of whom were expert gardeners It might seem that the stimulus of growing population and rising prices would produce a change for the better. There is another side to the picture. The sixteenth century saw an economic revolu-

tion no less profound than that of two centuries later. The enclosure movement sweeping over the Midland and Eastern counties from Berkshire and Oxfordshire in the south to Lincoln and Norfolk in the north-east had turned large areas into sheep walks. And though this movement had passed its worst by 1550 it left behind it a terrible trail of displacement of tenantry, of unemployment and poverty. Moreover, England's great woollen industry, closely bound up with the economic fortunes of the Low Countries, suffered severely from Anglo-Spanish rivalry. From 1586 to the end of Elizabeth's reign the spinners and weavers faced unemployment and want. Lord Burghley feared that

"this great matter of the lack of vent not only of cloths, which presently is the greatest, but of all other English commodities which are restrained from Spain, Portugal, Barbary, France, Flanders, Hamburg, and the States, cannot but in process of time work a great change and dangerous issue to the people of the realm, who heretofore in time of outward peace lived thereby, and without it must either perish for want or fall into violence "

"We much fear," wrote the justices of Gloucestershire to the Privy Council, "that the peace hereof will be very shortly endangered notwithstanding all the vigilance we use or can use to the contrary," since workmen "do wander, beg and steal, and are in case to starve as their faces (to our great griefs) do manifest." (Lipson, *Economic History of England*, 1931, iii, 303, 306, 1931.)

In such times of unemployment, bad harvests, and rising prices, there must have been much under-nourishment, intensified by the increased pressure of the population on the sources of wild herbs, fruit, and milk supplies.

A sign of the times was the prevalence of rickets—essentially a *deficiency* disease, involving bone and tooth deformities. Nowadays we know that vitamin D, found chiefly in milk, butter, and eggs, but manufactured in the skin when there is abundant sunlight, promotes the absorption from the digestive tract of calcium salts and phosphates necessary for the build-up of skeletal tissues. Deprivation of adequate supplies of such foods causes the bone and tooth defects characteristic of rickets. Milk itself is not a valuable source of this vitamin, but its calcium salts and phosphates make it a valuable anti-rachitic agent.

In many countries, rickets is still an important social disease. During the Great War of 1914–18, greatly reduced consumption of milk, butter and eggs was accompanied by severe outbursts in Vienna and elsewhere. According to a League of Nations Report on Nutrition, nearly all the children of the Negro population in New York were suffering from rickets in 1917; 83 per cent of the children in Connecticut in 1923; 43·4 per cent in the villages of the north of Norway in 1931; 33 to 67 per cent in two northern counties of Sweden.

"As regards dental caries," the Report adds, "the enquiries carried out in various European countries have shown it to be present in from 50 to 95 per cent of the children examined."

The first mention of rickets in England occurs in the early seventeenth century. Between 1630 and 1650 several books on the subject were written

by medical men, chief of whom were Francis Glisson and Daniel Whistler. About the same time the Royal College of Physicians was devoting its attention to the study of the disease. It is unlikely that rickets was unknown before this time, though it was probably never a widespread disease The common diet of wholemeal bread, fish, milk, eggs, butter, cheese, bean soups and a little meat provided an adequate intake of lime and phosphates. Unemployment and poverty at the close of Elizabeth's reign, and the fact that a growing proportion of the people were industrial workers, probably had the effect of increasing consumption of bread at the expense of milk, butter, and eggs This would result in decreased intake of lime, though not of phosphorus, while loss of milk and eggs would lower the intake of vitamin D, the anti-rachitic vitamin.

On the other hand scurvy, the disease of seamen, was doubtless well known during the seventeenth century at home. Despite increased interest in gardening, there is little doubt that ordinary people consumed insufficient quantities of fruit and vegetables. So mild scurvy and certainly pre-scorbutic conditions must have been very common. Though smallpox and plague have no immediate dietary cause, poverty and unemployment must have been a predisposing condition. Smallpox, which had existed long before this time, came rapidly into prominence at the end of Elizabeth's reign. The period coincided with repeated visitations of the plague—1580–4, 1606–7, 1625, 1629–31, 1636, 1663–4, culminating in the Great Plague of London in 1665–6.

FOOD AND DRINK IN THE SEVENTEENTH CENTURY

During the second half of the seventeenth century the diet of the country folk changed little. Bacon, salt meat, cheese, bread, and bean soups continued to be their main food. In the towns, the staple foods were bread, meat, butter, cheese and beer. Expansion of dairy farming was bringing more cheese and butter to the town populations, but this development generally resulted in less milk for the country people

In upper class homes meat and fowl predominated. It was not until the closing years of the century that vegetables appear on the table as a separate dish. Breakfast, consisting of cold meat, fish, cheese, ale or beer, was generally taken early, between 6 and 7 a.m. Dinner was at noon, and was the main meal of the day. Towards the end of the century, the custom of drinking tea and coffee encouraged the habit of dining late. On January 26, 1660, Samuel Pepys returned from his office to his lodgings where his wife had prepared what he calls

"a very fine dinner—viz. a dish of marrow-bones; a leg of mutton, a loin of veal, a dish of fowl; three pullets, and a dozen of larks all in a dish, a great tart, a neat's tongue, a dish of anchovies; a dish of prawns and cheese. My company was my father, my uncle Fenner, his two sons, Mr. Pierce, and all their wives, and my brother Tom." (*Diary of Samuel Pepys*, i, 12)

On April 3rd, 1663, for dinner he had "a fricasee of rabbits, and chickens, a leg of mutton boiled, three carps in a dish, a great dish of a side of lamb, a dish of roasted pigeons, a dish of four lobsters, three tarts, a lamprey pie, a most rare pie, a dish of anchovies, good wine of several sorts, and all things mighty noble, and to my great content" (i, 354).

The fall in the price of sugar, due to the importations of the East India Company, established the custom of serving sweets or puddings after the heaviest courses. "Blessed be he that invented pudding," says a contemporary French visitor to England, "for it is a Manna that hits the Palates of all Sortes of People" (quoted Drummond, 135)

A change of some interest and importance took place in drinking habits. Down to this time ale made from barley had been the common beverage, but now with progress of the hop industry in Kent, beer gradually gained in popularity among all classes, though the rich continued to use the high-priced French wines and brandies. Spirit-drinking was a new habit. By 1700 it had become very widespread In the next half-century it was an abundant cause of social misery and moral degradation. In London the gin shops, providing a cheap spirit within the purchasing power of the poorer classes, multiplied.

"'Tis a growing vice among the common people, and may in time prevail as much as opium with the Turks, to which many attribute the scarcity of people in the East," said a writer in 1701 (Davenant, *Essays upon Ways and Means*, 1701, 134, quoted Mrs. George, *London Life in the Eighteenth Century*, 1930).

Fielding, Hogarth and many others urged the Government to do something to check the evil consequences of unrestricted gin-drinking. But landowners and farmers protested that an industry which put money into their pockets should be encouraged as a national one It used the produce of the land. At last, in 1751, there was legislative action. As a result of increased duties gin-drinking gradually went out. Meantime Burton-on-Trent was laying the foundations of its famous Worthington and Bass. Tea was gaining in popularity (Fig. 9).

In Scotland the seventeenth century was one of unrelieved gloom. Unsettled political conditions, the hostility of England, and economic backwardness of the country as a whole resulted in a very low standard of living for all. The staple food was porridge or brose, with milk or ale, eaten morning and evening. Commonly, the midday dinner consisted of more porridge and milk, cheese and butter, and on special days broth, sometimes made with salted meat or barley and seasoned with kail Then there were oatcakes or bannocks (see *Scotland's Inner Man*, by Victor MacClure, 1935). Fish was not popular in Scotland, partly because of supposed association with leprosy, a disease which had not quite disappeared in the Scotland of the eighteenth century. Fresh meat could rarely be had except in summer or autumn.

"For half the year," says Mackintosh in 1729 (*Essay on Ways and Means for Enclosing*, 131), "in many towns of Scotland there is no beef or mutton to be seen in their shambles and, if any, it is like carrion meat, yet dearer than ever I saw in England."

The chief, and often the only, vegetable was kail. Before the Union, potatoes and turnips grew in a few gardens, though not those of the peasantry The close dependence of the people on their own crops is striking in times of famine. Disease and death took a heavy toll. The worst disaster of its kind is known as the *seven ill years* (1693–1700). Accounts of people dying by

the wayside, exhausted and starved, are too numerous to be doubted. Cattle and sheep perished, the corn lay rotting in the fields while prices rose to famine levels

Meanwhile, the upper classes did not fare so badly. Payments of most rents *in kind* generally assured the landlords sufficient meal, poultry, eggs, cheese and sheep. By this time most Scottish country houses had large gardens well supplied with vegetables.

Down to the end of the eighteenth century, claret was a popular drink among the well-to-do MacClure says: "In the middle of the century it was sold for an average of fivepence a bottle, and in Edinburgh it was wheeled about the streets in casks and dispensed to purchasers in stoups. A new cargo arriving at Leith was 'cried' in the Edinburgh streets." But already production and consumption of whisky was on the up-grade. By 1800 it was a thriving Scottish industry.

THE NEW FARMING AND INCREASING POPULATION

The revolution in farming technique, discussed in the previous chapter, had a profound effect on the food of the people Farmers and landowners in co-operation with scientific workers revolutionized methods of growing crops and rearing animals The produce of the land was enormously increased, and there was a great increase of population beginning about 1740. The close connexion between growth in numbers and supply of food provoked much discussion about 1800. The most outstanding figure in this controversy was Thomas Malthus, whose views were notoriously pessimistic.

"Famine seems to be the last, the most dreadful resource of nature," he says in his *Essay on the Principle of Population*, 1798, 139 "The power of population is so superior to the power in the earth to produce subsistence for man, that premature death must in some shape or other visit the human race. The vices of mankind are active and able ministers of depopulation They are the precursors in the great army of destruction, and often finish the dreadful work themselves But should they fail in this war of extermination, sickly seasons, epidemics, pestilence, and plague, advance in terrific array, and sweep off their thousands and ten thousands Should success be still incomplete; gigantic inevitable famine stalks in the rear, and with one mighty blow, levels the population with the food of the world."

But science, stimulated by urgent social demands, has since confounded the prophets. If we cannot adequately feed the people of our country to-day, giving to everyone the possibility of rightful health and recreation, we cannot lay the blame at the door of science or of the workers by hand and brain. It is the fault of man-made institutions which cannot solve the problem of wealth-consumption.

We have to bear in mind three major points, when we recall what changes of diet resulted from the Agrarian Revolution The eighteenth century saw a great increase of wheat cultivation The result was that wheaten bread was one of the chief foods consumed in England before Victoria came to the throne. Since cultivation of turnips and grasses solved the problem of the winter feeding of cattle, it was no longer necessary to kill off large numbers

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of beasts in the autumn. Fresh meat rapidly took the place of salt meat in winter. Moreover, advances in scientific breeding, together, of course, with use of the new green foods, resulted in an astonishing increase in the size of cattle and sheep. This, of itself, augmented the supply of meat. More extensive cultivation of potatoes at the same time provided valuable new food for the masses.

THE ENGLISH RURAL LABOURER

In the early eighteenth century the ordinary country folk of England ate wholemeal bread (made with rye, barley, or wheat, or a combination of them), salted pork, fish (in some districts), milk, butter, cheese and eggs, with bread and cheese predominating. As the century advanced their standard of living rose. They consumed more butter. Potatoes and vegetables slowly found their way into their diet. This improvement was not maintained. Even before 1800 there were signs of a definite setback. A succession of bad harvests, exhausting wars, increased taxation and high prices, each contributed The enclosure movement stimulated by rising prices and war conditions, deeply affected not only the social organization of the countryside, but the standard of living as well. The small man, deprived of his precious rights to common and waste land, could no longer keep a cow or pigs. He found himself landless, or with a small patch of ground which was supposed to, but could not possibly, compensate for what he had lost

Eden (*The State of the Poor*, 1797) brings this out very vividly when he contrasts the position of countrymen in the south of England with those in the north. In the south they lived on bread and cheese, ale or beer and sometimes tea—"the deleterious produce of China" as he calls it. Meat might be consumed once a week, and by meat Eden meant pickled pork, but many families had none. Loss of common rights for some meant the loss of their cow and all its valuable products. Such was the state of affairs in the counties most affected by enclosure The upper classes complained loudly that the poverty of the country folk was due to the extravagant habits of eating wheaten bread, instead of the traditional barley or maslin bread, and of drinking tea instead of milk. What they failed to see was that this diet was largely the result of poverty. Davies says (*The Case of the Labourers in Husbandry*, 1795):

"The topic on which the declaimers against the extravagance of the poor display their eloquence with most success, is *tea-drinking* Why should such people, it is asked, indulge in a luxury which is only proper for their betters; and not rather content themselves with milk, which is in every form wholesome and nourishing? Were it true that poor people could everywhere procure so excellent an article as milk, there would be then just reason to reproach them for giving the preference to the miserable infusion of which they are so fond. But it is not so. Wherever the poor can get milk, do they not gladly use it? And where they cannot get it, would they not gladly exchange their tea for it? . . . Still you exclaim, *Tea is a luxury*. If you mean fine hyson tea, sweetened with refined sugar, and softened with cream, I readily admit it to be so. But *this* is not the tea of the poor. Spring water, just coloured with a few leaves of the lowest-priced tea, and sweetened with the brownest sugar, is the luxury for which you reproach them. To this they have recourse from mere necessity:

and were they now to be deprived of this, they would immediately be reduced to bread and water. Tea-drinking is not the cause, but the consequence of the distresses of the poor"

In the northern counties, as Eden points out, conditions were much better, for they had not been so deeply affected by enclosure. Oats and barley bread or maslin were eaten, and milk and butter were plentiful because most of the people still kept cows. In their cottage gardens they grew potatoes and vegetables. As a consequence rickets and other deficiency diseases were less common in the north than in the south.

PORRIDGE, MILK AND POTATOES

Before the New Farming transformed Scottish agriculture, the staple food of the people was oatmeal, in the form of porridge or oatcakes, and milk or ale. A certain amount of salted meat was used and soups seasoned with kail were common. Indeed, every cottage had its "kail-yaird." In the eighteenth century, the introduction of the potato revolutionized the food habits of the Scots. Potato is a particularly valuable food, because rich in vitamin C; and its consumption proved a certain check to the ravages of scurvy. In the Highlands especially, the potato caught on quickly. Even before 1800 it constituted four-fifths of the food of the people. Its cultivation involved much less labour and yet yielded more food per acre than any other crop. Population now grew rapidly until overcrowding compelled emigration.

"A labouring man, and whose wife has even a moderate share of industry," says the Minister of Strachur in Argyllshire in 1792, "can maintain a family of four or five children in a very decent manner and give them a suitable education . . . There being no market contiguous, they lay in for their winter provision the half of a small cow or bullock, weighing from 10 to 12 stone Tron weight, or a proportionable quantity of mutton, and a store of herring. This with potatoes, is their food for half the year. For the other half, they live on oatmeal, milk, and sometimes fresh herring. The potatoes, indeed, generally last three-quarters of a year. Such of them as have a milk cow, which most of them have, gather as much dung as enables them to raise a sufficient quantity of this root" (*Old Statistical Account*, 1792, iv, 572).

It used to be common for a Scottish University student to take from his home a bag of potatoes or a bag of meal; and this provided him with most of the food he required during the session. Sir Peter Scott Lang, sometime Professor of Mathematics in the University of St Andrews, recalls student days of 1840. He writes:

"One student . . . whom I had the pleasure of knowing, told me that all he spent on his food was one shilling and twopence for a week or a fortnight—I do not remember which I asked How was that? He replied, 'When I came to College I brought from home a sack of peasemeal. I had peasemeal brose for breakfast, peasemeal brose for dinner, peasemeal brose for supper, and the outlay of 1/2 was for milk with which to eat the brose.' He added that the student who lived immediately above him was even more economical. He came from Dundee; his mother was a washerwoman. With him he brought a sack of

potatoes and a large fat ham. For dinner he handed to his landlady three or four potatoes to boil, with instructions not to peel them, and they, with a slice of ham, formed his dinner . . . He entered the Church, got a parish, but did not live long. My old friend, the peasemeal-brose man, was a strong man" (*Duncan Dewar*, with a Commentary by Sir Peter Scott Lang, Glasgow, 1926, 112).

ADULTERATION OF FOOD

Our knowledge of the food of the townspeople is very meagre, but when we remember the long hours of labour in the factory, the low wages, the pitiful housing conditions, the periods of unemployment, we are justified in assuming that the standard of living must have been very low indeed. Crowded in their towns these people were at a disadvantage compared with those in the country. The latter at least got fresh air and sunlight while they worked in the fields. Sometimes they had gardens where they could grow potatoes and other vegetables While they were able to get supplies more or less fresh, the townspeople had to use food that had often come a long distance and was by no means fresh They had to contend with unscrupulous dealers who used every device to defraud their customers.

About the middle of the eighteenth century, following the publication of several pamphlets, there was a public outcry against the adulteration of food. In 1757 a pamphlet entitled *Poison Detected, or Frightful Truths* accused millers of adding lime, bone-ashes, whiting, lime and alum to flour, thus at once increasing its weight and lightening its colour. Another pamphleteer declared that bones taken from dust-heaps were boiled to remove fat and incinerated to a white powder and then added to flour It is doubtful if all the ingredients mentioned could be added to flour for baking bread, but the use of alum was very general.

"And chalk and alum and plaster
Are sold to the poor for bread" (TENNYSON.)

As late as 1840, at a time when the use of alum by bakers was illegal, it was frequently used under the name of "stuff." It had the effect of whitening bread made from inferior flour, and giving it a firmness which enabled the bread to be handled without ill effects. Yet alum was definitely harmful A new interest in analytical chemistry, initiated by Black, Priestley, Scheele and Lavoisier, stimulated further inquiry into the chemistry of food production. In 1820 tremendous interest was aroused by the publication of a book entitled *A Treatise on the Adulterations of Food and Culinary Poisons*, by Frederick Accum, a distinguished chemist (Fig. 10) This book had an amazing sale, both at home and abroad. In it the author exposed the prodigal adulteration of food then practised by grocers, bakers and brewers, and even went so far as to publish the names of individuals guilty of these practices. Thirty years later *Lancet*, the medical journal, set on foot an inquiry into food adulteration, and its report, with the names of offenders, was published in its pages. *Punch* enthusiastically took up the cause. At last, in 1855, the Government appointed a Commission to inquire into the subject. This was followed by the first Food and Drugs Act of 1860. Under its provisions public authorities were given power to appoint analysts. It was soon a dead letter, and it

was not until 1872 that an effective measure got on the Statute Book (*see* Drummond, 223–6, 341–8).

Rapid concentration of population in the towns, involving transport and storage of food, proceeded more rapidly than advance of knowledge regarding the chemical nature of food, and changes likely to take place over a period of time. Butter had to be heavily salted, and even then it had to be "reconditioned" by melting, adding soda and tallow. Flour often became rancid before use in the bakehouse, and meat in the first stages of putrefaction was commonly sold over the counter.

THE FIRST NATIONAL FOOD INQUIRY

The Napoleonic War was followed by a long period of depression in industry and agriculture. Many pictures have been painted of the degrading conditions under which the urban and rural workers lived at this time. They "knew all too well," says Professor Drummond, "the horrors of death from starvation, hunger-œdema, and every form of nutritional disorder. There has never been a period in our history when rickets, scurvy, chlorosis and other diseases due to bad diet were so prevalent." It was during this period that tea, bread and butter and potatoes became the staple food of the working-class.

In 1863 the Privy Council instituted the first national inquiry into diet. This is an important landmark in the history of food and health. So far, a great deal of attention had been paid to sanitary conditions, and by this time the municipal authorities were busy cleaning up their towns, laying on water supplies, carrying out drainage and sewage schemes, removing some of the worst abuses revealed by Chadwick. But now there was growing recognition of the need for more attention to the food of the people.

"In order justly to estimate the sanitary circumstance of a people," says Simon in his *Extracts from Privy Council Reports*, "scientific regard must be had to the quantity and quality of the people's meat and drink" (*Public Health, Reports by John Simon*, London, ii, 1887, 92).

Appreciating this new point of view, the Privy Council ordered an inquiry into the *Food of the Poorer Labouring Classes*. The investigation covered two main groups of people, farm labourers and home-workers, such as silk-weavers, needlewomen, shoemakers, stocking-makers, glove-weavers and kid glove stitchers, still employed in their own homes by manufacturers. With regard to the latter class, the Report says, "the average quantity of food supplied was too little for health and strength " Bread, butter, tea, sugar predominated in their diets. Some, like the needlewomen of London, had no milk, while many ate little or no beef.

"The stocking-weaver," reports the medical investigator, "is always a poor man, ill-fed, and ill-clad, and without provision for the future. He is obliged to labour from early morning to a late hour at night and although he may make 7 doz or 12 doz. or 15 doz. of gloves per week, according to their quality and his expertness, he cannot earn more than from 6 to 15s. per week" (Medical Officer's Report, Privy Council, 1863, Vol. vi. *Report on the Food of the Poorer Labouring Classes in England*, 227).

The condition of the agricultural labourers varied from county to county; but certain points stand out in the Report. Wheaten flour was in general use. Everywhere potatoes were eaten in summer and early winter, but throughout the rest of the year either none at all or very small quantities were consumed. Cabbages and turnips were used sparingly. Sugar was a common article of consumption, though where milk was abundant "it was either not eaten at all or in very small quantities." There were few families where butter was eaten every day; in general the poorer people had two days a week on which the children ate dry bread. The consumption of milk varied considerably. In the dairy counties skim milk was plentiful, but where cheese-making was the important part of dairy work, it was most difficult to obtain either new or skimmed milk.

"The use of tea may now be said to be universal," says the Report. Tea was not regarded by the people as a food. Though much more nourishment could be obtained by spending the same money on milk, tea had the advantage of adding brightness and warmth to the meal. And the poorer people were, the more was milk displaced by tea Within the family the mother and children got the lion's share of tea, taking it two and three times a day, while the more wholesome foods, like meat, were reserved for the father. The following are a few typical menus.—

DORSET:	
Breakfast	Water broth, bread, butter, tea and milk.
Dinner	Husband has bread and cheese; family take tea besides.
Supper	Hot fried bacon and cabbage, or bread and cheese.
LINCOLN:	
Breakfast	Milk gruel, or bread and water, or tea and bread.
Dinner	Meat for husband only; others vegetables only.
Tea and Supper	Bread or potatoes.
DURHAM:	
Breakfast 8 *a.m.*	Tea or coffee, bread and butter.
Dinner 12 *noon*	When hot it is meat and vegetables; when cold it is tea, bread and lard.
Tea 6 *p.m*	Tea, bread and milk.
Supper 9 *p.m.*	Fried potatoes and bacon sometimes.
LANCASHIRE.	
Breakfast	Milk, porridge, coffee, bread, and butter.
Dinner	Meat and potatoes, or meat pie, rice pudding or a baked pudding: the husband takes ale, bread and cheese.
Supper	Tea, toasted cheese, and bacon instead of butter.
STAFFORDSHIRE:	
Breakfast	Coffee and bread, or bread, butter or sugar.
Dinner	Little meat or bacon daily, and chiefly for husband: vegetables and bread.
Tea	Tea, bread and butter.

The Scottish style of living was rather different. Bread was not purchased as a principal article of diet. Wheaten flour and barley meal were made into scones or bannocks while oatmeal, in the form of porridge or oatcakes, was consumed by every family investigated. Potatoes too were generally eaten, especially in the Highlands, but meat did not play a large part in diet. "The largest share of butcher's meat was obtained by the shepherds," says the Report, "since they ate the lambs and sheep dying of an acute disease termed braxy, and perhaps also of the staggers and other less acute diseases. . . . Cases were mentioned to me where employers had given and labourers accepted for human food sheep which had lain dead for many days before they had been discovered." Such was the scandal of the truck system, under which the labourers were paid wholly or partly in kind. They had no choice in the matter. As in England, tea was widely used, and its consumption was on the increase. The following are a few samples of the meals of the Scottish farm-labourer:—

Breakfast 9 a.m.	Porridge, followed by bread and milk.
Dinner 2 p.m.	Potatoes, herrings and milk, or meat and sometimes cheese.
Supper 7 p.m.	Porridge or tea.

Breakfast	Porridge and milk, followed by bread and tea.
Dinner	Potatoes and fish or milk.
Supper	Porridge and milk.

Breakfast and Supper	Porridge and milk, followed, at the former, by tea and oatmeal cakes.

Contrasted with the menu in Ayr Poor House in 1756 (T. Hamilton, *Poor Relief in South Ayrshire*, 1942, 86), it is surprising how little change had taken place:

Day	*Breakfast*	*Dinner*	*Supper*
SUNDAY	Oatmeal pottage with ale or milk	Bread and ale or milk.	Broth, bread and flesh
MONDAY	do.	Herring and potatoes or salmon and bread.	Oatmeal pottage with ale or milk.
TUESDAY	do.	Broth, bread and cheese or butter.	do
WEDNESDAY	do	Broth, bread and flesh	do.
THURSDAY	do.	Herrings and potatoes, or salmon and bread.	do.
FRIDAY	do	Broth, bread and flesh.	do.
SATURDAY	do.	Broth, bread and cheese or butter.	do.

By 1863 ale had gone and tea had come in, and potatoes were more plentiful.

WHITE BREAD

From the foregoing it will be noticed that several items bulk larger in the menus of ordinary people than hitherto. In a sense they are the products of the agrarian revolution and of the expansion of overseas commerce. They are white bread, meat, tea, sugar and potatoes.

By the middle of the nineteenth century wheat had become the chief bread grain of the people. Oats still occupied a prominent place in Scotland. There too, white flour was gaining ground. In making this change Britain was doing what most other civilized countries have done. One is prompted to ask why should wheat, which is not nutritionally superior to the other chief cereals, secure this place of pre-eminence? It is not sufficient to answer that wheaten bread is more palatable, or that, being white, it is more attractive to the eye. We have to bear in mind the influence of those considered to be socially superior Wheat was first used by the wealthy, and the desire of the ordinary folk to follow their example was prompted to some extent by a feeling of social inferiority. There were economic reasons too, chief of which was greatly increased output of wheat during the eighteenth and nineteenth centuries, following the adoption of improved farming methods. The change from rye bread or maslin or oatcakes to wheaten bread was not a retrograde step

"If the comparison be made on the basis of identical dietary proportions," says Dr. Kelly (*Wheat: Imperial Bureau of Animal Nutrition, Technical Communication,* No 7, 1936, Rowett Institute, Aberdeen), "of the whole grains of either wheat or barley, oats or rye, then no evidence has emerged to justify our placing any one of these in a higher nutritional category than another. To all intents and purposes they are of equal nutritional value."

The important matter, however, is not whether rye or wheat, barley or oats is used, but what is the degree of refinement carried out in the milling process. Cereals are a valuable source of the B group of vitamins, a deficiency of which causes beri-beri, pellagra, and various disorders and diseases of the alimentary tract. They are also an important source of vitamin E, a dietary constituent essential for normal reproductive functions. The B vitamin content of cereals is concentrated in the outer layers of the grain. The removal of the outer layer of rice by polishing has the most disastrous results. Vitamin B is destroyed, and this is the chief reason why beri-beri is so widespread in Japan. A high degree of milling removes B and E vitamins from wheat as well.

Such high-grade milling was established in Britain during the 1880's. Before this time stone-grinding was general, and the power used was wind or water. As early as 1753 an attempt had been made to make a mill with iron rollers, but it was not until the Exhibition of 1862 that a workable roller-mill, already in use on the Continent, was demonstrated. Thereafter a few enterprising millers took it up, and in the eighties there was a general move from stone-grinding to the new roller-grinders. At the same time steam power was coming into use. Great flour-mills were erected at the ports, like Glasgow, London, Hull, Bristol, Birkenhead and Cardiff, where wheat was now being imported from America Gradually the old windmills and water-mills went out of commission, some to fall to pieces, others to be preserved "as museum pieces" (Clapham, *An Economic History of Modern Britain*, 1938, iii, 185–6).

In the new roller-mills the germ of the wheat was crushed and could be removed. The flour thus obtained was whiter in appearance. It would keep much better than the wholemeal, but its special vitamins and the minerals were largely destroyed in the process. It is only now that we begin to realize what tremendous loss this involved, and how much ill-health resulted from the change. If people live on a good mixed diet, a vitamin deficiency of bread alone is unimportant. Milk, fruit and vegetables can more than compensate. But if they are too poor to purchase sufficient of these other foods, a large consumption of white bread instead of wholemeal bread is definitely injurious to health. What is still more serious is that bread is one of the cheapest foods The lower the wage, the larger the proportion spent on this cheap carbohydrate food. Underweight, a tendency to anæmia and rickets are only some of the consequences. The wage-earner's first consideration is to obtain sufficient heavy food to still the pangs of hunger If his income is small, he will take the cheapest source, and this usually means that he will be unable to purchase a sufficient quota of minerals and vitamins contained in more expensive articles of diet.

THE ROAST BEEF OF OLD ENGLAND

We have seen that one of the essential features of the agrarian revolution was the introduction of artificial grasses and turnips; in other words the production of food for cattle. The problem of winter fodder was solved, and "the roast beef of Old England" gradually took the place of salted and smoked meat. During the seventeenth and eighteenth centuries new crops and the new experiments in breeding had revolutionized the meat trade. In the second quarter of the nineteenth century, new means of transport—railways and steamships—brought the increased produce of the farm lands to teeming populations of towns. Before this time, cattle walked to market. They could now be sent by steamer or freight-car. As a consequence the consumption of meat both in Scotland and England increased steadily.

The "roast beef of Old England" was not always above reproach. Indeed, there is little doubt that its increased consumption added to the toll of ill-health. "Allegations have during the last few years been abundantly made," says Simon (*Public Health Reports*, ii, 75), "and have with the progress of time become more and more definite, that the flesh of animals slaughtered while in a state of disease, and likewise the milk of diseased animals are extensively sold for home consumption in the United Kingdom." In 1862 the Privy Council ordered an inquiry into the matter, and Professor John Gamgee, Principal of the Edinburgh New Veterinary College, reported that disease was widespread among cattle, sheep and swine. He adds:

"the diseased state of an animal not only does not commonly lead the owner to withhold it from being slaughtered for consumption as human food, but on the contrary in large classes of cases (especially where the disease is of an acute kind) leads him to take immediate measures with a view to this application of the diseased animal; and that consequently a very large proportion of the common meat of the country—beef, veal, mutton, lamb and pork, comes from animals which are considerably diseased"

TEA

Tea was hardly known before the Restoration of 1660. In the *Diary* of Samuel Pepys there is the following entry under September 25, 1660: "I did send for a cup of tee (a China drink) of which I had never drank before"

About the same time coffee and cocoa were introduced into England. The first public coffee house was opened in St. Michael's Alley, London, in 1652, and soon many others were established. The Coffee House became a famous meeting-place (Fig 11).

"You have all Manner of News there: You have a good Fire, which you may sit by as long as you please: You have a Dish of Coffee, you meet your Friends for the Transaction of Business, and all for a Penny, if you don't care to spend more" (quoted Drummond, 140)

There was much opposition to the new drinks, especially from vested interests who identified the consumption of ale and beer with patriotism. There was also the opposition of conservative minds. In 1729, when tea-drinking was making some progress in Scotland, Macintosh of Borlum lamented the new fashions.

"When I came to my friends' house of a morning," he wrote, "I used to be asked if I had my morning draught yet I am now asked if I have yet had my tea. And in lieu of the big quaigh with strong ale and toast, and after a dram of good wholesome Scots spirits, there is now the tea-kettle put to the fire, the tea-table and silver and China equipage brought in, with marmalade and cream." But some tempered their tea with whisky.

The food inquiry of 1863 showed that the use of tea was general among the poorer-paid workers In Great Britain consumption rose from almost 3m lb. in 1755 to over 22m lb. in 1831. This doubtless affected the consumption of stronger drinks, hence the association of the temperance movement with tea-drinking.

SUGAR

Consumption of tea, coffee and cocoa, as well as the increasing use of easily assimilated foods, has resulted in one of the greatest dietary changes of modern times—an enormous expansion of the consumption of sugar. Sugar had been known in medieval times, but mainly as a medicine. Colonial expansion in the seventeenth century resulted in larger supplies, but increased consumption at home depended on considerable changes of dietary fashion. The following figures show a rapid increase in the consumption of cane sugar in Britain in spite of heavy taxation, raised from 3s. 5d. per cwt. in the early eighteenth century to 6s. 8d. in 1780, and, under pressure of war taxation, to 30s. in 1806. In the 1820's, British consumption ranged between 150,000 and 160,000 tons, or almost 20 lb. per head per annum; and this at a time when, owing to heavy taxation, the price of the lowest grade sugar was between 6d. and 9d. per lb. (Clapham, i, 245).

Meantime other sources of sugar had been discovered In 1747 a German chemist, Margraf, discovered the presence of sugar in beetroot Early attempts

to utilize it proved unprofitable, though in 1797 a Silesian, Archard, improved the original process of extraction and set up a factory. During the Revolutionary Wars when France was cut off from overseas sugar, Napoleon ordered the planting of 80,000 acres of beet, hoping thereby to make France independent of cane sugar supplies. After 1815 the progress of the industry both in France and Germany was substantial, and especially after 1830 when various technical improvements were made, production increased rapidly. In 1848, 250,000 tons of beet were grown; by 1910 this had increased to 10m tons. Meantime scientific advances had raised the sugar content of the beet, while improved industrial processes resulted in the extraction of a larger proportion of sugar. In 1848 it took 20 tons of beet to produce one ton of sugar; in 1920 it required only 6½ tons.

In the development of this important industry Germany led the way. In 1914 Germany grew one-third of the world's crop. More recently, in her desire to be economically independent, she has been searching for sugar substitutes. More than a hundred years ago, Braconnet showed that sugars could be obtained by the action of sulphuric acid on cellulose. In 1855 the use of hydrochloric acid for this process was discovered by Mehsens, and improved on by Bergius. It is now being operated commercially. The wood-sugar industry of Germany has opened up great possibilities.

"Only half of the wood in trees is used as lumber," says J. G. Crowther (*Search for Substitutes*), "the rest is waste. The waste chips, twigs, and sawdust provide an unlimited source of sugar Bergius states that wood-sugar can be produced in the timber countries, such as the Baltic States and Canada, more cheaply than cane sugar, and give yeast and pure glucose for human consumption, besides raw products for cattle fodder. As carbohydrates are the basis of animal and human nutrition, he claims that all countries with adequate wood supplies can, if they wish, make themselves self-supporting in food."

On this subject Hogben observes: "The production of sugar from cellulose or from other complex carbohydrates may in course of time replace the present custom of growing local species which store carbohydrates in the form of sugar (e.g. cane, maple, beet), by the production of any species which manufacture carbohydrates rapidly."

Sugar and cereals belong to the group of energy-giving foods How far can one regard the increasing consumption of sugar with satisfaction? It has been established that during the last hundred years a five-fold increase of consumption has taken place in the United Kingdom. The refined sugar, which is so generally used, is like highly-milled cereal products, devoid of any protective elements, such as minerals or vitamins. It provides energy and nothing more, for sugar is exclusively a fuel food, completely free of fat, proteins, vitamins or mineral elements. Dieteticians, therefore, view with some misgivings the increasing consumption of sugar. If it displaces cereals in diet, as appears to be the tendency, there is the loss of valuable nutritive properties contained in the husk and germ of the grain, expecially the vitamin B group. Its popularity is due to its taste, and to the flavour it imparts to other foods. Its great danger is that it creates an appetite for itself, and, if eaten to excess, displaces other foods which provide protective constituents.

POTATOES

The potato is one of the most valuable foods that found its way into people's diet during the nineteenth century. Rich in calories and in starch, it is well suited to take the place of sugar and cereals in the modern diet. Moreover, it is a valuable source of iron and of the anti-scorbutic vitamin C, which it retains in high proportion after cooking. Before the war of 1914–18, when vegetables and fresh fruit were not consumed as much as to-day, the potato provided diet constituents not easily obtained from any other source.

Brought to England possibly in Elizabethan times, the potato was for long regarded as a precious garden vegetable. In the eighteenth century its popularity spread rapidly in Scotland and Ireland, but in England its consumption was not general till the following century. Being a cheap food, the potato was very valuable to the poorer sections of the community. The close dependence of the poor on this crop had, however, serious consequences In a time of scarcity they found it impossible to change over to wheat, which was much more expensive. Moreover, potatoes are not easily kept. They are not readily transported. Each year has, so to speak, to stand by itself. A witness before the Agricultural Committee of 1821 stated that fluctuation of the cost of wheat is thought to be great when its price doubles. In a scarce year the potato may be, not infrequently, six times as dear as in a plentiful one. Hence the terrible effects of a potato famine Nevertheless a crop so easily raised, and one which in normal years yielded so lavish a return to labour, was of great value in an age of rapidly expanding population. Specially valuable as a source of vitamin C, the cheap potato of the nineteenth century stood between the mass of the poor and scurvy. When the crop failed, as in 1846–7, there was an outbreak of the disease.

FOOD PRESERVATION

For centuries the only foods preserved were meat and fish. The methods employed were salting, pickling, drying and smoking. Long sea voyages and rapid growth of towns made urgent the problem of food preservation. About 1800 Appert, a Frenchman, and Saddington, an Englishman, were experimenting with the canning of meat and vegetables, and in 1812 a London firm set up a factory for meat-preserving by Appert's method at Bermondsey. So successful was the venture that the British army and navy and the East India Company were using their products before the end of the Napoleonic War. Emigrant ships were later ordered to carry supplies of preserved meats.

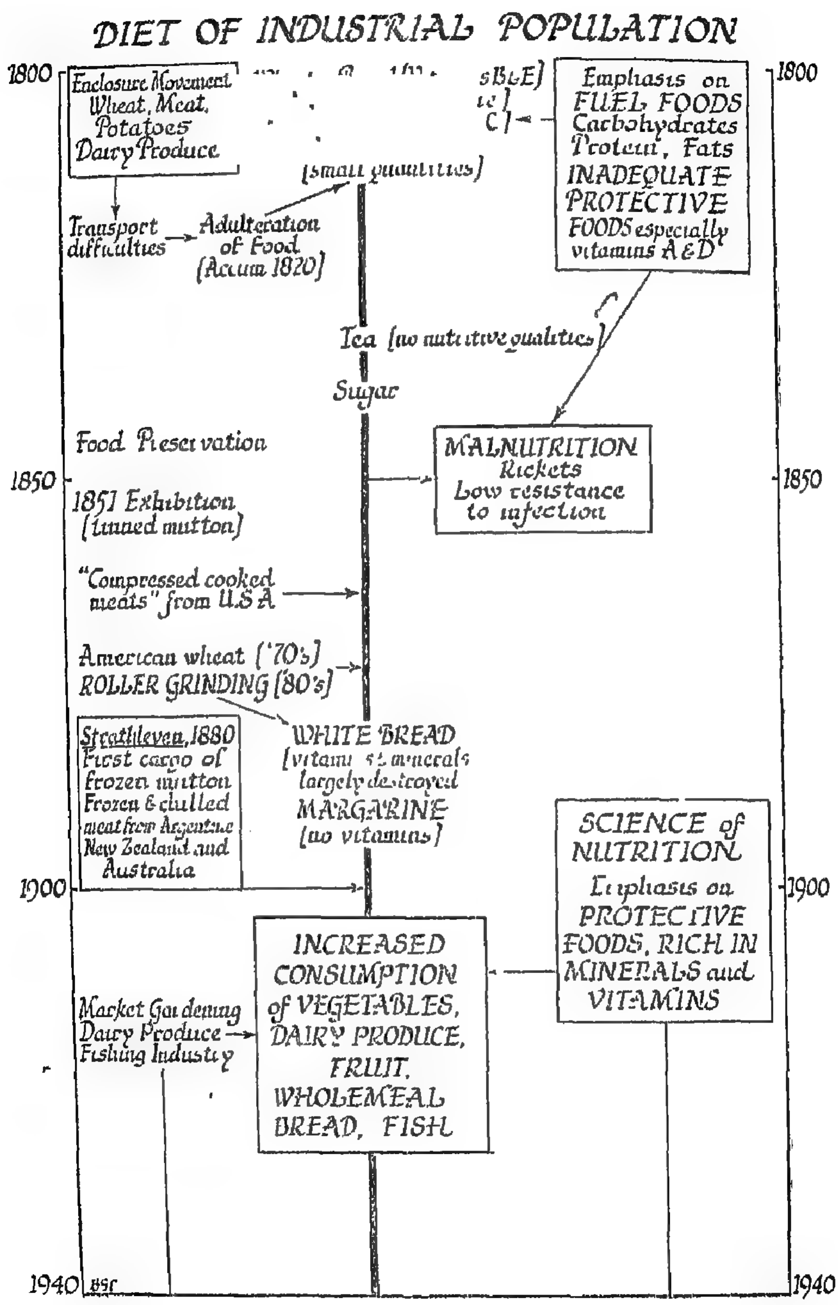
Such a discovery was of great social importance. It introduced a new element into diet, and in time led to great change in the food trade. Scotland was early interested in the new process, perhaps because of close interest in fish-curing. It is significant that Aberdeen took the lead in 1822. Her merchants commenced preserving salmon for exportation, and later added meats, soups, game, fish and vegetables. Soon they were supplying ships sailing from London, Liverpool and Glasgow, and in the Crimean War they executed large contracts for the British and French Governments. Scotsmen abroad were able to have their haggis canned.

For long, however, tinned meats were used almost exclusively by sailors and soldiers and explorers. Even in 1880, when the Royal Society of Arts set up a Committee to report on the food of the people with special reference to "the production, importation, and preservation of substances suitable for food," the canning industry was still in the experimental stage (Clapham, ii, 91). Its possibilities were appreciated by the Australians. At the Great Exhibition of 1851 tinned mutton was on view. In the late 'sixties Australian meat extract and tinned meats began to come into general consumption. Shortly afterwards, Chicago, which had now supplanted Cincinnati as centre of the American meat-packing industry, was exporting "compressed cooked meats" to Britain. Before 1880 the British people were consuming large quantities of home and foreign-produced tinned foods.

The development of international trade in perishable commodities was largely due to the invention of the refrigerating process and its adaptation to the transport of meat in refrigerating vans and steamers. As early as 1810, Sir John Leslie made ice in his laboratory at Edinburgh. In the 'thirties there were many inventions for making ice, but of little commercial importance. Thirty years later, refrigeration and its bearing on food supplies was widely discussed. In 1867 Reece invented an ammonia-freezing plant, and shortly afterwards Sutcliffe Mort, a Sydney wool-broker, started in New South Wales the first freezing works in the world. February 2, 1880, was the date when the *Strathleven* brought the first cargo of frozen mutton to England. Five years previously the first shipment of chilled meat, kept cool by natural ice and a hand-worked fan, came from New York. With the aid of refrigerating plant on train and steamer, the Chicago meat trade increased at a phenomenal rate. In 1850–1 about 20,000 hogs were killed, by 1890–1 the figure had reached 6,071,000 In the fifty years before the war of 1914–18, the capital in the meat-packing industry grew from 10m dollars to 534m dollars, and the value of the product from 29m dollars to 1,651m dollars (*Economic Development of the United States*, by I. Lippincott, 1922, 465).

By the middle eighties, as a consequence of improvements in refrigerating plant, "there was," says Clapham, "an established import trade in frozen mutton and frozen or chilled beef; but it was small and very new, and the facilities for its conduct were far from satisfactory." In 1886 almost 30,000 tons of frozen mutton landed at British ports. Most of it came from New Zealand. By that time 40,000 tons of frozen or chilled beef arrived annually, almost all of it from the United States. A little came from South America, but chilled meat was more difficult to transport than frozen, because of the effects of temperature changes. It was not until the twentieth century that trade in chilled meat from South America and Australia began to boom. Imports from the United States reached their maximum in 1907 and then rapidly dwindled, as her place was taken by the Argentine.

Of the 350,000 tons imported in 1910, five-sevenths came from South America, and more than half of it was the more valuable chilled meat By this time refrigerating plant had improved greatly. There was abundant shipping tonnage available for this comparatively new and profitable trade. On account of its fat, mutton was not so suitable for chilling. So it was



Time Chart 4. Food and Health

imported frozen. In 1886, 30,000 tons came in By 1910–13, the annual import had increased to 250,000, two-fifths of it from New Zealand *

"At the end of the nineteenth century," says Shann (*Economic History of Australia*, 1938, 343), "it was easier to put Australian food on English tables in perfect preservation than it had been to put French or Irish produce there when Queen Victoria came to the throne."

Thus the trade and consumption of preserved meat expanded. From mutton, beef and fish, preservation and tinning had been extended to countless foods. Before 1900 herring were being canned, and in the present century great progress has been made in the preserving and canning of fruit, vegetables, eggs, meat, milk, fish, cheese and numerous other foods. The results of such scientific discoveries are of tremendous importance to the everyday life of mankind. We can now be independent of season and harvest, and have fresh food of every kind all the year round. When there is a glut, we can store food for use in times of shortage. All that is needed is provision of adequate storage plants all over the country.

RECENT TRENDS IN DIET

In the last fifty years considerable advances have been made in human nutrition. Before 1900 white bread, margarine, jam, tea, and potatoes had come to constitute the chief items in the diet of working-class people. It was a poor diet from a nutritional point of view, and must have been the cause of much ill-health and premature death. Highly-milled white bread is almost free of vitamins of the B group. Margarine, invented by a French chemist and first produced in England about 1880, is almost entirely devoid of the fat-soluble vitamins which butter provides. Jam lacks vitamins of any class. Tea contains no nutritional elements of any consequence. These therefore made little contribution to physical well-being. Small wonder that rickets was common, and that chronic malnutrition contributed to the widespread ravages of consumption.

In the present century diet has become more diversified, and this has resulted partly from the improved methods of transport and partly from a rising standard of living, effected by the increased application of science to agriculture and manufacturing. The character of the food problem has altered.†

"Throughout many parts of the world, it practically ceased to be a problem of hunger and became rather a problem of nutrition," says the League of Nations Committee on Nutrition (1937, 97).

These economic and social changes have been accompanied by great progress in the science of nutrition. Whereas medical experts of the nineteenth

* Clapham, iii, 186–7. For details of the imported meat trade, see First Report of Royal Commission on Food Prices, 1925, Cmd. 2390.

† The following paragraphs are largely based on several League of Nations Reports, viz. Report on Nutrition, 1937, The Problem of Nutrition, Vol. III, Nutrition in Various Countries, 1936, Vol. IV, Statistics of Food Production, Consumption and Prices, 1936.

century were largely concerned with quantity of food, and the focus of research was the energy requirements of the body by the use of fats, carbohydrates and proteins, a new interest in *quality* develops. The importance of the energy-bearing foods, such as sugar and cereals, remains as great as ever; but we now realize the need for "protective foods," rich in minerals and vitamins. The chief protective foods are milk, butter, eggs, green vegetables, fruit, glandular tissue and fat fish. In the present century, and more especially since the war of 1914–18, the significant change that has taken place in diet has been increased consumption of foods of this class, and decreased consumption of certain energy-bearing foods, notably cereals.

This change is due to several things A rising standard of living tends to replace bread by more expensive foods, and introduces greater variety into the diet. Progressive mechanization of industry and expansion of such secondary industries as the distributive trades, clerical work, public and professional services, tend to reduce fuel requirements of the human machine, because office-workers need less than workers engaged in heavy manual occupations. Housing improvements and provision of transport facilities have also helped to reduce the energy requirements of the body, though greater popularity of sports and outdoor activities may have operated in the contrary direction To all these we have to add the spread of popular knowledge of the new science of nutrition.

The two chief energy-bearing foods are cereals and sugar. Of the former, especially in the wheat-using countries, there has been an absolute decline. In the British Isles wheat consumption per head fell from 151·3 kg. in 1894–9 to 134·7 kg in 1929–34, and in the United States during the same period from 145·6 kg to 100·2 kg. Contrariwise, as we have already noticed, there has been a remarkable increase of sugar consumed In 1821 the people of the United States used 3·6 kg of sugar per head; in 1900 it was 30 2 and in 1928 over 47 kg. per head. During the past century, average consumption is estimated to have quintupled in the United Kingdom. To some extent, sugar has displaced wheat as an energy-giving food, and its increased consumption has accompanied a growing taste for fruit.

Increased consumption of fruit is one of the most striking changes that has taken place in the present century From a nutritional point of view, the importance of this cannot be over-emphasized, because it means more widespread access to sources of vitamins and mineral elements.

"In Great Britain and Northern Ireland, the total supplies of fruit available for consumption (not including cottage-garden produce and consumption on farms) was 1,864,000 metric tons in 1924–28 compared with 1,271,000 metric tons in Great Britain and Ireland in 1909–13. As the population was the same in the two periods, this represents an apparent rise of nearly 50 % in *per caput* consumption—from 27 7 kg to 41 3 kg per head The available statistics suggest a further increase of the consumption of fresh fruit of more than 15 % between 1924–28 and 1934. In the United States, although to some extent at the expense of apple consumption, the consumption of other fresh fruit increased from about 23 kg. per head at the beginning of the century to nearly 45 kg. per head in 1923–27" (*Report on Nutrition*, 131)

This is encouraging so far as it goes; but it does not call for complacency. The expenditure of the mass of the people on fruit is still very small indeed, amounting to no more than 2½d. per head per week for 4½m people. As income rises, expenditure on fruit increases sharply. Indeed, the problem of adequate nutrition for all is still the problem of poverty. Poverty is not confined to the slums. It embraces the great mass of the people whose inadequate wages prevent purchase of food they require for full physical development and good health.

Since the war of 1914–18 there has been a very large increase of vegetable consumption. Dieteticians view this increase with great satisfaction, because fresh green vegetables are particularly rich in vitamins A and B and are among the chief sources of the anti-scorbutic vitamin C. They are also rich in minerals. In the United Kingdom, consumption of fresh vegetables other than potatoes rose from 27·2 kg per head in 1909–13 to 44·5 kg. in 1934.

Milk is one of the most valuable foods. It contains all the constituents necessary for growth and maintenance of life—the energy-giving protein, fat and carbohydrate, all the essential known vitamins, together with salts of calcium and phosphates. The results of experiments carried out on animals and of observations of the effect of increased milk consumption on children and adults are remarkable. In a boys' home near London, gains of 7 lb. body weight and 2·63 inches height per year are recorded for inmates who received a pint of milk daily in addition to the ordinary diet. Others who did not receive the additional milk gained only 3·89 lb. and 1·84 inches in the same period. In 1927 additional milk was given to some 1,500 school-children in seven of the largest towns in Scotland over a period of seven months. Periodic examinations revealed that the rate of growth in those getting the additional milk was about 20 per cent greater than in those not getting the extra ration of milk. Moreover, there was a striking improvement of health and vigour.* There have been many other similar experiments both at home and abroad, all of which prove conclusively the remarkable nutritional qualities of milk.

Domestic consumption of milk and milk products increased rapidly towards the end of the nineteenth century, following improvement of transport and development of the dairying industry. The *Report on Nutrition* says: "The growth of dairying has, indeed, been one of the most remarkable features of recent world agricultural development, and the upward trend of milk production has been accentuated during the past decade. The increase in output has far exceeded the growth in population and has coincided with well-considered efforts in many countries to direct public attention to the special nutritive virtues of milk and dairy products." The average *per caput* consumption of liquid milk rose in the United States from 144 litres in 1923 to 154 in 1929. In Great Britain, on the other hand, the rate of increase was slightly less rapid after the war of 1914–18 than before it. The average consumption per head in 1930–1 was only about two-thirds of the American. So far as butter is concerned, Great Britain advanced her consumption from 6·9 kg. per head in 1907 to 11·4 kg. in 1935, while consumption in the United States, the world's largest butter producer, has remained fairly stable at 8 kg. per head for at least the last 25 years.

* J. B Orr, *Lancet*, 1928, ccxiv, 214; 1930, ccxix, 594.

The consumption of fish per head has shown little change. This is noteworthy, if one considers what great changes have taken place in the production and distribution of fish during the present century, as the result of steam transport and refrigeration. Fish is a particularly valuable food, because it contains more iodine than land plants or meat, and the thyroid gland needs iodine to make its secretion which is essential for normal bodily growth. Moreover, fat fish like salmon, herring, butterfish, and mackerel are important sources of vitamins A and B. The liver of fish, especially halibut and tunny fish, contains large concentrations of A.

The science of nutrition has opened a new chapter in the history of the human race. Rickets, which in our own day is still rife among the children of the poor, is now known to be of dietetic origin and easily preventable. Bad teeth, defective bones, and numerous other troubles are penalties of malnutrition, especially in childhood Moreover we now realize that properly fed children are not so liable to infections as those whose diet is deficient. In short, physiology has placed in our hands the knowledge of how to raise and maintain a healthy population Scientific invention, new techniques of production and industrial organization, have together provided us with the means of producing food in abundance. We have to choose between two courses of action. One is to check production so as to bring it into conformity with an artificially limited demand. The other is to use fully the vast sources at our command by changing our economic set-up.

THE BADNESS OF BRITISH COOKING

Britons who have been abroad realize with what justice continentals and Americans can comment adversely on our culinary standards. Why our national standard of cooking should be so bad is a question which admits of no simple or straightforward answer for England and Scotland alike. By comparison with the former, the climate of the latter admittedly limits what variety of produce is available for the table. Before the agrarian revolution of the eighteenth century the Scots housewife, thrown on her own resources, had to make do with oats and kail, the only green thing grown for food in her vegetable garden, or kail-yard, as she called it. So porridge, oatcakes, bannocks, sowens made from flour of oatmeal, together with kail soup, exhausted what menu she could provide The French housewife, on the other hand, has always had a greater variety of vegetables to make appetizing fare, an abundance of fresh fruit and wine to go with it. Still, the harshness of the Scottish climate does not explain the contrast between the diet of Scotland and that of Norway. In the time of Pepys or Samuel Johnson, the English table of the middle class was of good repute abroad, and we must therefore look to recent history for an explanation of the reputation it now enjoys.

When fresh vegetables and fodder for cattle were limited during the winter months, the British people once used spices lavishly to make their salt dishes palatable. The amount of spices imported by the East India Company was large, and attention paid to cooking was considerable, as cookery books of the Tudor period testify. Extension of gardening in Stuart times, followed by field cultivation of green crops, which solved the problem of winter fodder

for cattle, reduced the necessity for spices; and the trade with the Far East, so long sought after by Europeans, declined This decline coincided with expansion of home industry and with a wave of economic nationalism hostile to foreign imports, especially to goods brought in by the East India Company, and thus apt to exalt the solid virtues of plain English fare above the spiced and elaborate dishes encouraged by the eastern trade.

The switch-over from spiced dishes to fresh meat and plain living got a drive from another direction. The Puritan attitude to clothes, food, and ways of living in the days of Cromwell, though too violent to be lasting and hence followed by an orgy of extravagance and loose living in the Restoration period, lingered long after the latter, and came to life again in the ideology of the Wesleyan Movement during the eighteenth century. The Puritan tradition, with its close affinities to capitalism, accorded well with the views and social outlook of the new and rising manufacturing class who held the stage during the Industrial Revolution. Methodism stood for hard work, thrift, and plain living. Its influence on ways of living was profound. The standards set by Wesley's disciples and the plain living they eulogized were not calculated to encourage concern for the carnal delights of the table as a national art, at a time when intensive urbanization intervened to limit foodstuffs available to the housewife. The working classes gave pride of place to tea, jam and bread, with disastrous consequences to their health. The middle class acclaimed the roast beef of Old England as the crowning achievement of British cooking It was plain, it was home-produced, and could be eaten without the elaborate frills sought after by a continent which delighted in indulgence and easy living.

CHAPTER IV

DRESS

"Clothes gave us individuality, distinctions, social polity; clothes have made Men of us; they are threatening to make Clothes-screens of us." (CARLYLE.)

In colder climates, where civilization acquired a new impetus in medieval times, clothing takes second place only to food as a primary necessity of human survival. Its manufacture is a basic form of productive activity, and its interest does not end with the production of what people need in terms of protection and comfort or convenience. Communal tastes and fashions for apparel intimately and eloquently symbolize changing standards of etiquette, the duties and privileges of the sexes, moral beliefs and class prerogatives. Our preferences for particular styles are the outcome of successive changes of human values extending into a past about which most of us know next to nothing.

In medieval times it was a universal belief that society consisted of divinely-ordained classes. At a time when land was the basis of privilege and responsibility this was a view both easy to accept and generally approved. The conception of divinely-ordained classes gave no scope for fashion, the essence of which is competition and rivalry. Thus the costume of the Middle Ages displays remarkable uniformity and a plainness which reflects the primitive nature of contemporary industry.

The usual dress of a member of the upper classes consisted of a close-fitting tunic reaching to the middle and furnished with tight sleeves. Generally there was a broad and jewelled girdle, from which hung a dagger and a pouch. Over all, there was a gown with hood attached. Pointed shoes or boots, tight-fitting cloth stockings and gloves completed outdoor dress. The costume of the peasantry differed only in quality of material, shorter length of the garments, and economy of embellishments. There was a short tunic, with a plain girdle of leather, a head-dress covering both head and neck, and boots with leggings in the form of bandages of straw. Dress distinction between the sexes was less than nowadays. Upper-class women wore close gowns, tunics and a full mantle, while peasant women wore long gowns with ornamental belt, apron, and head-dress similar to that worn by men. Only in fullness and length of garment did the dress of the sexes differ (Figs. 12 and 13).

Within the caste system of the Middle Ages, the style of clothes sometimes served to emphasize community of interest or obligation. The great lord who invited his neighbours to place themselves under his protection gave them a livery, which was at once a badge of service and of protection. It was also customary for craftsmen of the same occupation to wear a distinctive dress to proclaim their common pursuits. Long after the Middle Ages, such liveries remained the outward symbol of the common interests

of members of crafts and trades. As late as the eighteenth century, the Leathersellers of London wore their livery, and the Glasgow "tobacco lords" of the same century are reputed to have worn red cloaks. (See *Gilds and Companies of London*, by George Unwin, 1925, 189 f.)

THE RISE OF CAPITALISM AND CLOTHES

Below the apparently unchanging life of medieval times were forces slowly changing the prevailing pattern of daily life and undermining the feudal structure of society. The rise of towns, extension of markets, contacts with foreign countries resulting from wars and peaceful commerce, conspired to bring into being a new social class—the *bourgeoisie* or middle class. Its outlook on trade, politics, and religion alike was new and fresh. For such the medieval framework was a prison. Above all they wanted freedom to live, to think, to make money in their own way; and though they had to fight long for their freedom, they eventually achieved it. As they grew in numbers and wealth, their political importance in the State increased. By Elizabeth's reign the wealthy merchants were the rivals of the landed aristocracy itself.

The new bourgeoisie had a profound influence on social customs and dress. Their trade supplemented and eventually replaced the business of foreign merchants who peddled in London fine silks, muslins and damasks from Bagdad, from Malabar, and from China; with fine woollen cloth from the famous looms of Ypres, of Bruges, of Ghent, and of Mechlin Before 1400 several groups of English merchants, including the Mercers and the Haberdashers, were importing threads, hats, ivory, mirrors, dyes, cloth of gold, velvet, satin, damask, silks, linen, etc Introduction of this variety of goods into England deeply influenced dress and fashion. The inventory of a Leicester mercer of the fifteenth century shows us how it did so. He had ready-made gowns in taffeta or silk, twenty different kinds of British and imported cloth, purses of gold cloth, belts, ribbons, skeins of Paris silk, children's stockings, silk coifs and kerchiefs for nuns.*

The new merchant personnel not only influenced dress by increasing importation of such materials, it introduced into class arrangements a laxity which undermined traditional social structure Old and simple arrangements of medieval times dissolved before the onrush of capitalism. New opportunities for profit-making, based on the spread of a money economy, destroyed the assumption that people should remain in the station into which they had been born The rigidity of social relationships softened, as the wealthy merchant discovered that money gained him admittance to the higher ranks of society. At first, he might be shunned as a vulgar *parvenu*, but could atone by investing his money in land. By so doing, he bestowed on himself a new importance and gave to his family a dignity which the older aristocracy was prepared to recognize. When debasement of the currency and the influx of bullion from the New World sent prices soaring in the sixteenth century, to

* See *English Trade in the Fifteenth Century*, edited by Eileen Power and M. M. Postan, 291.

the great loss of the landed gentry whose sources of income did not readily respond to changes in money values, the bourgeoisie could lend capital to needy landlords. They thus consolidated their position by purchase of bankrupt or forfeited estates.

The significance of this new class in the history of dress is that it encouraged rivalry and ostentation. Fashion now came into its own. Before 1400 there were complaints that extravagance in dress was tending to upset generally accepted class distinctions. The *Sumptuary Laws* were an attempt to check the forces that were creating a new type of society. The livery which had been the badge of common interests among members of a guild, now emphasized difference of wealth and economic status Only the more prosperous members could afford it.

DRESS IN THE AGE OF ELIZABETH

While expansion of commerce and growth of capitalism created conditions favouring fashion and rivalry of dress, they do not, of course, explain why particular styles had a vogue.

"In dealing with fashion," says Dr. Flügel (*The Psychology of Clothes*, 1930, 148), "we have to consider not only the individual creators of clothes but the group mentality of those who wear them."

The fashions of the sixteenth century portray a freedom, a boldness, a delight in new things and a craving after ornament that wealth alone makes possible. This is not surprising when we remember that Antwerp and London, Lisbon and Cadiz, were all agog with excitement over the discovery of America and the sea route to India and China. Merchants were deserting the rivers and the sheltered places for the uncharted ocean, dispatching their craft to new lands from which they brought back valuable cargoes to enrich stay-at-home shareholders. It was a century which saw an awakening of the spirit of inquiry in medicine, in science and in art It witnessed a revolution in industry, hardly less fundamental than that of two centuries later. It saw the old beliefs and practices of religion questioned and overturned. Reformation and peasants' revolts convulsed society at home and abroad.

A new spirit of freedom and enterprise, use of new materials from abroad, ostentatious display of wealth and rivalry of class with class are everywhere apparent throughout the reign of Elizabeth. Contemporary literature is replete with references to extravagance of dress now spreading throughout society. The rich wore elaborate and costly garments made of silk and velvet and satin, embroidered with gold. City merchants, and even the common people, according to complaint, were caught up in the craze for fashionable dress (Fig. 14).

"The ploughman," says Thomas Lodge, "must nowadays have his doublet of the fashion with wide cuts, his garters of fine silk of Granada, to meet his Sis on Sundays "

"There is not any people under the zodiac of heaven," writes Philip Stubbs,

"how clownish, rural or brutish soever, that is so poisoned with this arsenecke of Pride or hath drunk so deep of the dregs of this cup as Ailgna (England) hath."

Contemporary writers were naturally attracted by what was novel in their social life. So one must discount the view that the obliteration of class distinction went so far that it was no longer possible to distinguish individuals as "noble, worshipful, gentle or even yeoman." Though all classes were affected by new ideas and fashions, it is obvious that the change did not make for a drab uniformity. It is probably nearer the truth to say that fashion intensified class distinctions. The spread of fashion ever tends to rivalry and discrimination. Two striking features of feminine dress were the farthingale and the ruff. The farthingale, ancestor of the crinoline, was a vast petticoat of canvas or cloth distended with whalebone and covered with taffeta, velvet or silk. The impression of enormous width was enhanced by use of whalebone corsets and a stiff, pointed bodice. The ruff was the hall-mark of Elizabethan dress. It was a sort of pleated collar made of lawn or cambric, stiffened with wire and starch and ornamented with gold, silver, or silk lace. Cosmetics and elaborate hair-dressing were also fashionable.

"The women of Ailgna (England)," says Stubbs, "use to colour their faces with certain oyles, liquors, unguents, and waters made to that end, whereby they think their beauty is greatly decored."

In general form there was much similarity of dress between the sexes. Both aimed at breadth, the men using padding and the women whalebone. Their chief articles of dress were the velvet doublet, breeches ornamented with silk, gold and silver buttons and gold lacing, silk stockings, high-heeled shoes or boots, silk or velvet cloak, and elaborate hats decorated with bands and feathers.

"All this fantastic dress, it should be noted," says Professor Black, "was a glow of colour of the most bizarre description—popinjay blue, pease-porridge tawny, goose-turd green, lusty-gallant, Judas colour, etc." (*The Reign of Elizabeth*, 1936, 288).

Such, of course, were the dresses of the wealthy, but less elaborate copies of them were the rule among the middle class. Everyone affected ornamentation and all made some use or other of the new materials, cambric, lawns, silks and satins, which were being imported in larger and larger quantities. In Scotland, which had close associations with France, elaborate dress was also the rule among the well-to-do. The only national characteristic that distinguished the dress of a Scottish from an English courtier was the plaid, but its use was more general among the ordinary folk. Ministers wore the plaid when they appeared in the pulpit. As late as 1875, the General Assembly passed an ordinance against the practice.

The ordinary dress of the common people was made of home-produced kerseys, broad and coloured cloths. Craftsmen wore a closely fitting gown, broadcloth breeches, brightly coloured woollen cloth stockings, flat caps and

short boots or shoes. Their womenfolk wore simple gowns, rather full in the skirt with a short, spencer-like bodice, or a short kirtle or skirt with a gown over all. The material was plain woollen cloth. But the women of the merchant class disported themselves in farthingales and ruffs, stiff bodices and puffed sleeves. Clearly such dress was unsuitable for those who spent the best part of their day doing household tasks.

REVOLT OF THE MIDDLE CLASS

The extravagant and flamboyant dress of the upper classes in the reign of Elizabeth reflected the spirit of an age which was intoxicated with power and wealth. Holding the political destinies of the country in their hands, they believed that their social position in the State was unchallengeable. Yet the more discerning saw a subtle change taking place in the whole fabric of society. Amidst the everyday occupations of life, there was a new zest, a new energy, and a new determination. In the manufacture of cloth, in the mining of coal and the smelting of metals, in the production of paper and glass and a host of other new industries, output was increasing, fortunes were being made, and men were living socially useful and satisfying lives. Breaking with tradition, they applied their minds to the problems of mining, of manufacture, of commerce and finance, and in the economic field the new capitalist class was achieving notable triumphs. As they gained economic stature, they gained confidence in their powers and achievements. They felt contempt for an upper class whose extravagance and idleness they despised. By the purchase of estates or by marriage, the more wealthy of the bourgeoisie could, it is true, enter the ranks of the nobility. They were the exception to the rule. On the whole the new middle class, which derived its wealth from individual effort in trade, manufacture and commerce, was separated by a wide social gulf from the landed aristocracy, whose wealth came from the soil and whose privileges were their birthright. In politics, in religion, in social customs and outlook, there was a deep cleavage.

As events moved to their climax in the Puritan Revolution, the cleavage became deeper. In the reigns of the first two Stuarts, the extravagance of the wealthy was even greater than before. The laxity of Court morals was revolting to a class who lived laborious days. Moreover, the financial difficulties of the Stuarts, due partly to extravagance and partly to rising prices, led to sale of monopolies and to direct interference with trade. All this was anathema to those whose main occupation was business. They did not object to interference in their own interests, but they took exception when the sole object was to put money in the pocket of the Crown.

Fashions had changed since Elizabeth's day, but extravagance was still the rule in well-to-do circles. Men discarded the ruff and padding of Tudor times, and displayed the figure with less concealment; but the materials used, like silk and satin and velvet, were costly. The following items from the Daily Expense-Book of James Master (1646–76) give us a picture of the dress of a fashionable young gentleman of those times (George Clinch, *English Costume*, 1909, 97 f.)·

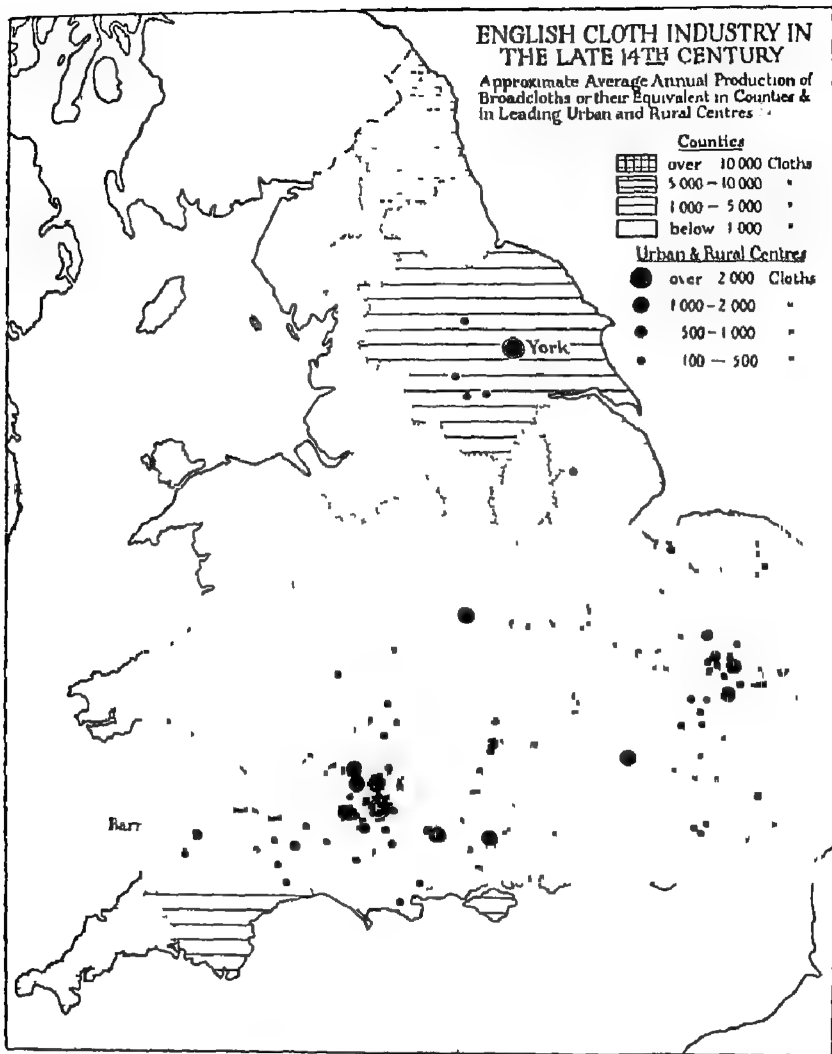


FIG. 15. ENGLISH CLOTH INDUSTRY IN THE LATE FOURTEENTH CENTURY

(*From Darby*, An Historical Geography of England before 1800, *Cambridge University Press*)

The cloth industry remained England's staple industry down to the industrial revolution In the fourteenth century, the chief region was "the west country," where Bristol, Bath, Frome and Wells were busy centres of weaving and finishing East Anglia, too, was full of weaving villages To the north Yorkshire had already established the industry on which its prosperity still rests So long as hand-spinning wheels and hand looms were used, the making of cloth could be carried on anywhere Every county, with the notable exception of Lancashire, produced some cloth

(See p 98)



FIG 16. SIR JOSHUA VAN NECK AND HIS FAMILY.

(*Arthur Devis*)

This is a typical middle-class family group of the eighteenth century The characteristic dress of the women is the enormous hooped skirt, while the men wear knee breeches, flowered waistcoats, silk stockings and buckled shoes, and, on the head, a wig Such was the costume of an idle society which sought distinction in the drawing-room rather than in the counting house Their style expressed confidence in their attainments and satisfaction with the society of which they were the ornaments (See p 102)



FIG 17 NORMAN MACLEOD OF MACLEOD, TWENTY-SECOND CHIEF

(*From the Painting by Allan Ramsay*)

A picture by Allan Ramsay, shows a Highland Chief o[f the] eighteenth century, dressed in tartan trews with the [plaid] thrown over the left shoulder He is Norman MacLe[od of] MacLeod—whose lands were in Skye and whose anc[estral] home was Dunvegan Castle

(See p 104)



FIG 18 HIGHLAND DRESS ABOUT 1730.

(*Burt's* Letters)

The typical features of Scots dress at this time were the trews—the tartan tights—and the plaid, loosely thrown over the shoulders, and sometimes tucked in around the waist The latter, divided into the kilt and the plaid proper, became the typical dress of the ordinary folk of eighteenth-century Scotland, while "gentlemen" continued to wear trews Before the close of the century the plaid was rapidly going out of fashion, even among the common folk It may still be seen at the Braemar Gathering and in the back streets of Glasgow where working women often go shopping with the plaid over their heads or shoulders

(See p 104)



FIG 19 YOUNG LADIES, 1860.

(*Young*, Early Victorian England, *by permission of Oxford University Press*)

The elaborate dress of the mid-Victorian "lady" with its distinctive crinoline suited an age unaccustomed to the bicycle or motor-car, one in which middle and upper class women were social ornaments Their styles emphasised leisure and ostentation, the twin characteristics of the womenfolk of the Victorian man of property

(See p 110)



FIG 20 FRONTISPIECE TO GLISSON'S DE RACHITIDE

(Drummond and Wilbraham, The Englishman's Food, *by permission of Jonathan Cape)*

Rickets is associated with industrialism and malnutrition It was prevalent in our great towns during the last century First studied and written about in the seventeenth century, its two outstanding features, seen in the frontispiece to Glisson's book, were malformation of bones and general deformity Whether it originated in England at this time is uncertain, but the prominence given to it suggests that it was becoming more general This may well be associated with growth of town life and extension of domestic employment where green food, milk and sunlight were not so readily accessible

(See p 122)

HAS

DEATH

(IN A RAGE)

Been invited by the Commissioners of Common Sewers to take up his abode in Lambeth? or, from what other villanous cause proceeds the frightful Mortality by which we are surrounded?

In this Pest-House of the Metropolis, and disgrace to the Nation, the main thoroughfares are still without Common Sewers, although the Inhabitants have paid exorbitant Rates from time immemorial!!!

"O Heaven! that such companions thou'dst unfold,
"And put in every honest hand, a whip,
"To lash the rascals naked through the world."

Unless something be speedily done to allay the growing discontent of the people, retributive justice in her salutary vengeance will commence her operations with the *Lamp-Iron* and the *Halter*.

SALUS POPULI.

***Lambeth, August,* 1832.**

J W PEEL, Printer, 9, New Cut, Lambeth

FIG 21 BROADSIDE, 1832.

(*Young,* Early Victorian England, *by permission of Oxford University Press*)

The connection between insanitary conditions and ill health, appreciated long before this time, was now obvious when the town had become the home of great numbers of people The author of this broadside was in no doubt about the causes of typhus and cholera then ravaging the country The public conscience was aroused, but strength of private interests and wide acceptance of *laissez faire* delayed progress In spite of revolting disclosures water companies still purveyed their impure supplies, spreading disease and death amongst the populace

(See p 129)



FIG 22. A COTTON MILL TOWN, LANCASHIRE

(*Central Aerophoto Co*)

The dreary layout of this industrial town, the congestion, and the proximity of houses to factories, is the legacy of the industrial revolution To-day we have fresh opportunities Use of coal and lack of short-distance transport are no longer of paramount importance. Electric power and modern transport enable us to make towns more desirable places to live in

(See p. 130)



FIG 24 GERMAN MERCHANT OF THE STEELYARD.

(*Holbein*)

Holbein, a Dutch artist, who painted Henry VIII, was one of the earliest and most famous of those who gained a livelihood from portraits for which the rising merchant class furnished an eager clientele This well-known picture of a merchant of the Steelyard, a German settlement in old London, exhibits the elegant style of dress which the affluent bourgeoisie of Tudor times affected

(See p 118)

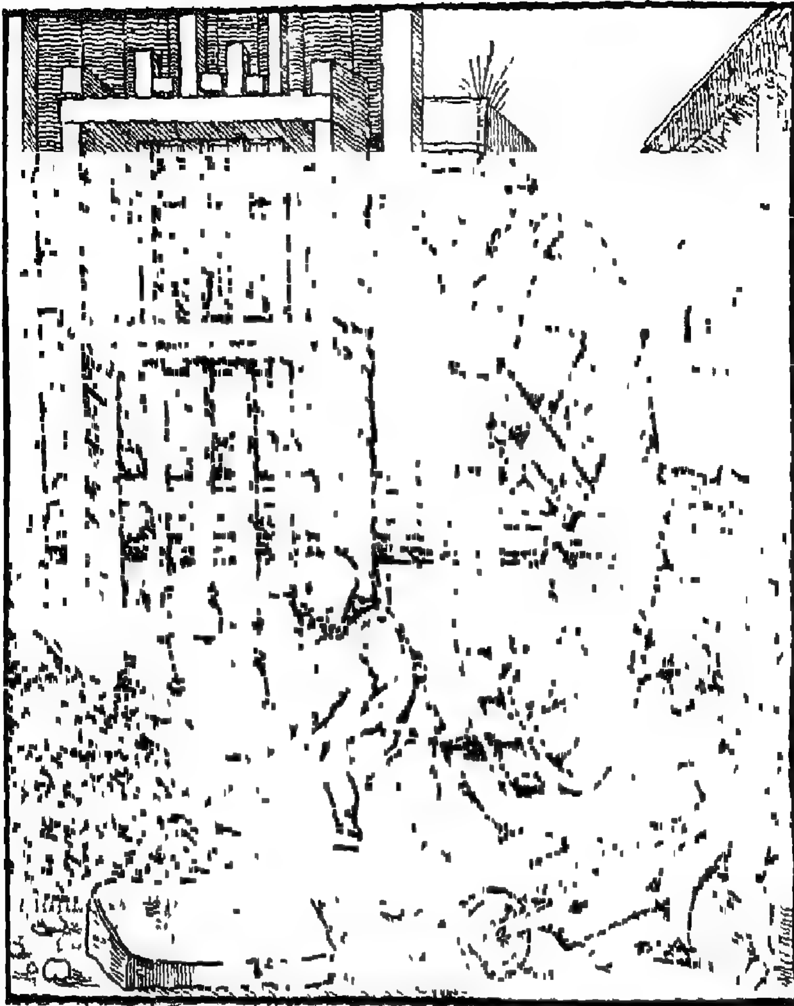


FIG 25 A STAMPING MILL

(*Georgius Agricola*, De Re Metallica, 1556)

This illustration shows the use of water power to drive the complicated mechanisms involving large investments of capital, well beyond the pocket of the craftsman Capital for such equipment could be provided only by men organized in partnerships or companies The dress of the workmen is not very different from that of the rustics of the fourteenth century (see Fig 13)

(See p 160)

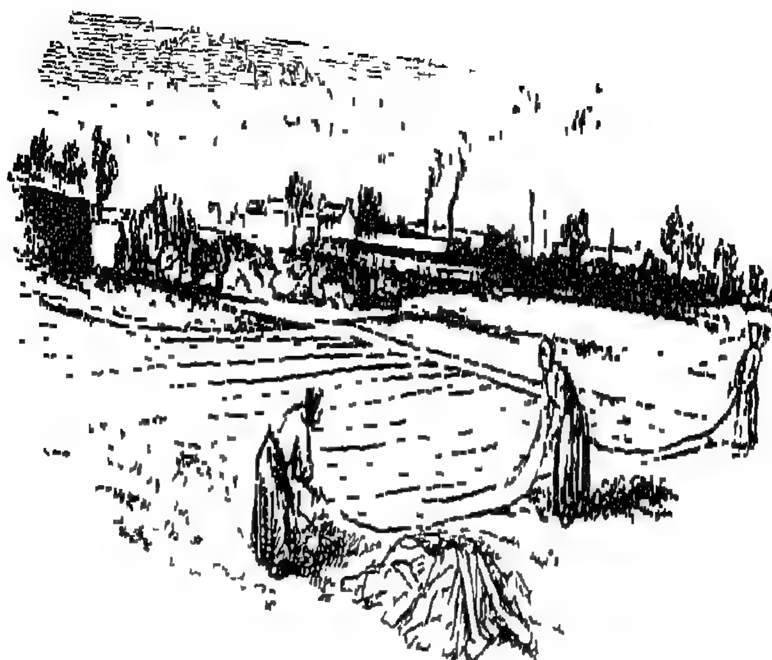


FIG 26 BLEACHFIELD.

(*Knight's* Cyclopaedia of the Industry of All Nations, 1851)

Bleaching was a slow and laborious process until the discovery of chlorine at the end of the eighteenth century The method followed was to boil the cloth with ashes (rich in alkaline carbonates) and then with sour milk (acid) Thereafter it was exposed for long periods to sunlight until the required whiteness was obtained Bleaching therefore tended to become a highly specialized business involving considerable outlay of capital and employment of large numbers of wage-earners

(See p 165)

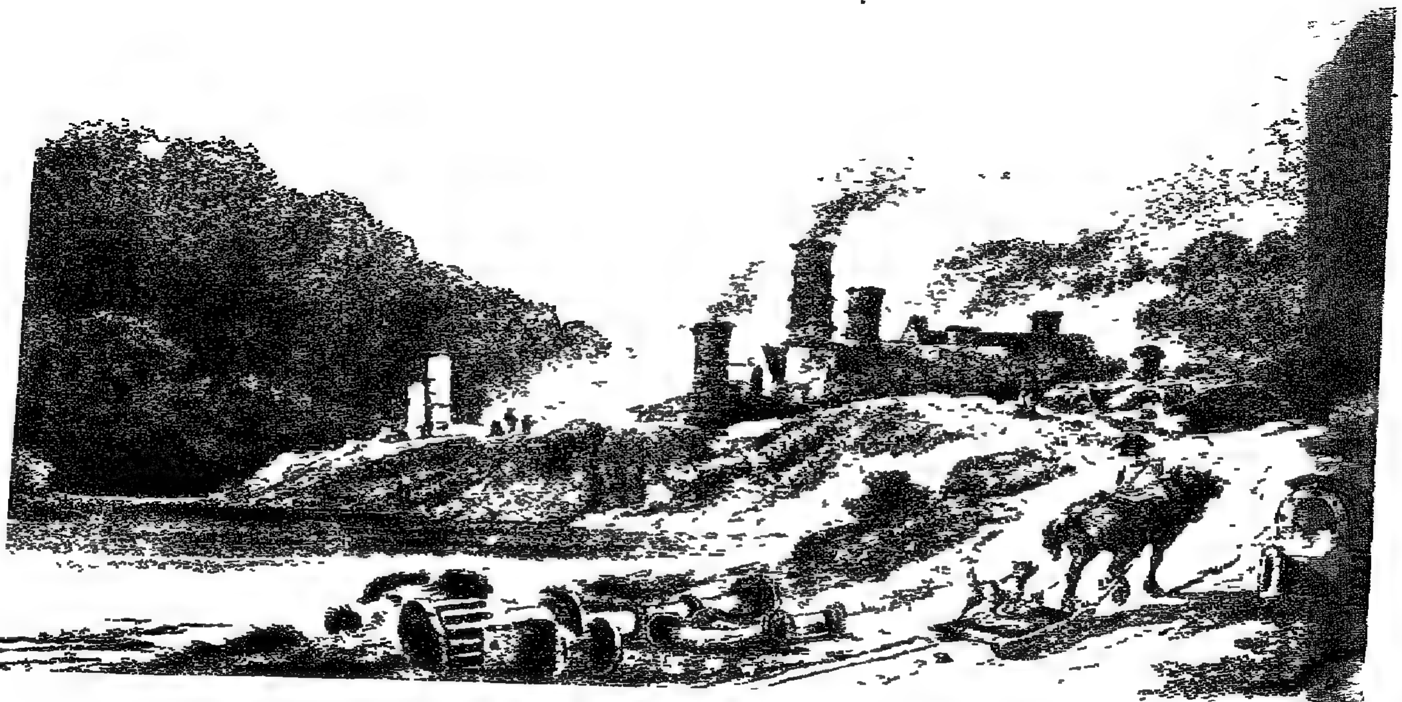


FIG 27 IRON WORKS IN COALBROOKDALE, SHROPSHIRE

(*From* The King's Topography, *by permission of the Trustees of the British Museum*)

This became the most famous iron works in England in the eighteenth century It was here that Abraham Darby perfected his method of using coal for smelting iron The picture well illustrates the birth of a new age—the age of coal and iron, involving steam power and large industrial capital Notice the cast iron products in the foreground Casting became one of the chief processes in the production of iron goods at this time (See p 172)

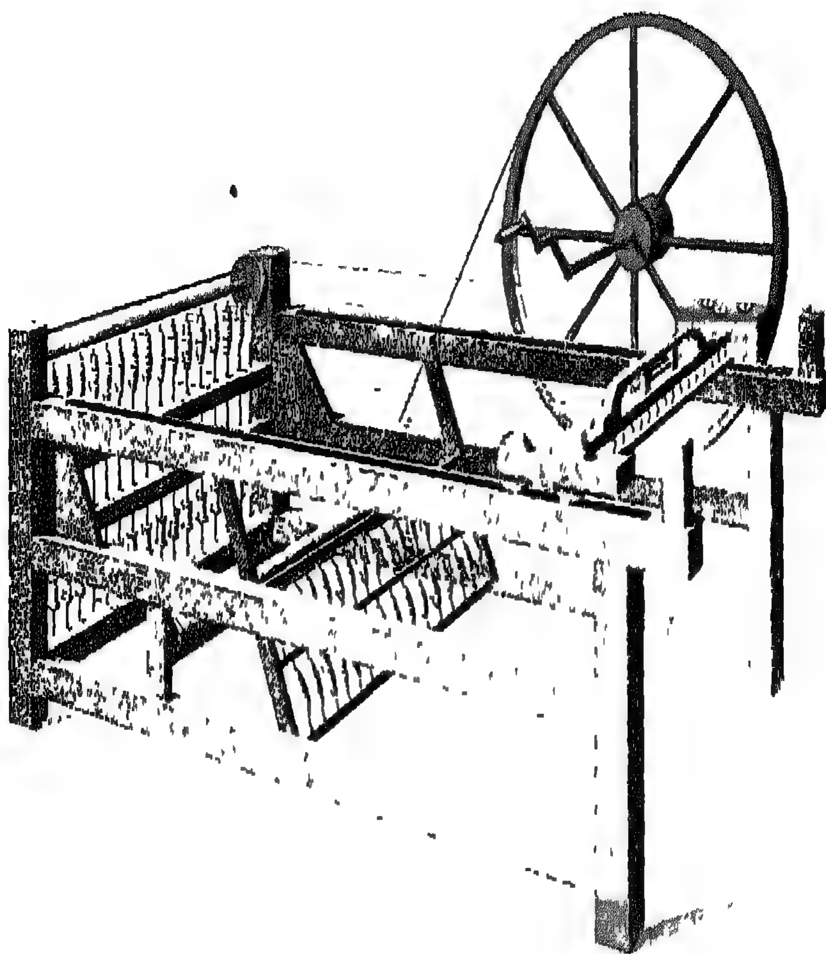


FIG 28 SPINNING JENNY

(*Baines*, Cotton Manufacture, 1835)

The Spinning Jenny was clearly a great advance on the old spinning-wheel Whereas the latter had only one spindle or at most two, the former might have over 100 This was a hand-machine and could be worked by children or women in the homes, but it vastly increased output and so upset the balance between spinning and weaving

(See p. 177)



FIG 29 MACHINE SPINNING

(*Baines*, Cotton Manufacture, 1835)

The first *mules* were hand machines, but about 1790 they were adapted to power This illustration shows power mules for spinning in operation Two features here attract attention (*a*) the large number of spindles and hence enormous increase of factory output, (*b*) the effect of new work conditions on the individual

(See p 177)

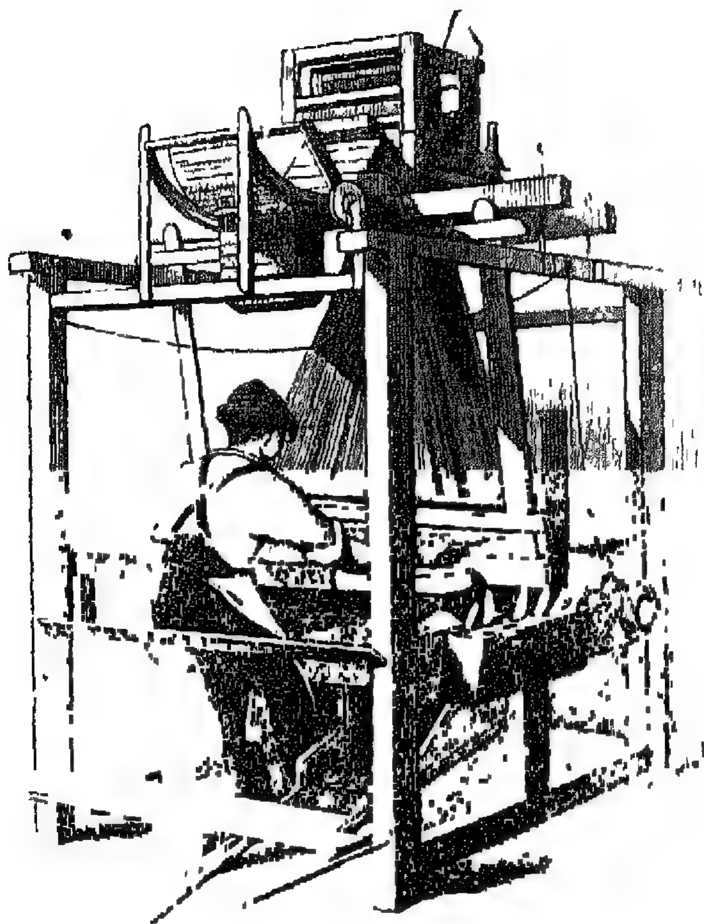


FIG 30 THE HAND-LOOM

(*Knight*, Knowledge is Power, 1855)

This loom was for making carpets, but for any type of product the essential problem of weaving—crossing weft and warp—was the same A striking feature of the hand-loom is its great complexity It was one thing to adapt the spinning process to power production It was quite another to make a power-loom The highly-skilled weaver worker was not easy to replace by power-driven machinery (See p 178)



FIG. 31 POWER-LOOM WEAVING

(*Baines*, Cotton Manufacture, 1835)

To invent a satisfactory power loom took many years Hand-loom weaving had been a man's job, but women are now employed Skilled men were gradually driven to making finer and finer cloths, ultimately to unemployment and destitution

(See p 178)

		£	s.	d.
1646–47				
Jan.	For 4 yards & an halfe of Spanish cloth for a sute & cloake at 23s the yard	5	3	0
	For 28 yar. of ribbon for points & tagging them	1	4	0
	For 8 yar. of silver ribbon at 15d ya.	–	10	·0
	For 4 pa of plaine boothose tops	–	12	0
	For an hat	–	14	6
	For 2 pa of ancle wosted socks	–	3	2
	For a pa(ir) of perfumed gloves	–	2	6
	Paid to the Tailour for making my saad coulour cloath suit and cloake	2	1	0
	For a pair of black topps with gold and silver fringe	–	3	6
	For 6 pa. of linnen socks	–	3	–
	For a pa. of hâlfe silk stockings	–	9	6
	For 4 ounces of powder for haire	–	1	–
	For 3 ya. of black ribbon	–	–	6
	For 8 ya of serge at 4/6 ya for a sute & cloake	1	16	–
	For an ell quarter & halfe of taffa at 12s ell to line ..	–	16	6
	For 4 dozen and half of little silver lace weighing 10 ounces and a little over at 4s. 8d. ye ounce	2	7	–

The new fashions spread downwards, The yeoman-farmer of East Anglia, for instance, wore close-fitting and plaited knee-breeches, tightly-fitting tunic buttoned at the front, stockings, buckled shoes and a loose, open cloak with turned-down collar. By discarding their whalebone and stuffing and by substituting collars of muslin or linen for the stiff ruffs, the women also seem more natural in their dress. But wealthy women were still ornate regardless of cost. Laces, silks, muslins, and linen were lavishly used to decorate what might otherwise have been convenient attire. The Puritans, drawn mostly from the middle classes, directed their full fury against these extravagances.

"In fact, the puritan revolution," says Davies (*The Early Stuarts*, 1930, 306), "was in some respects a protest against social customs as well as against political or religious grievances. Quakerism, for example, might be regarded as one manifestation of the revolt of democracy against ceremoniousness in dress and speech. In one of the most interesting of quaker diaries, Thomas Ellwood, Milton's amanuensis, tells us that he began by giving up the vanities of worldly dress—'trimmings of lace, ribbons, and useless buttons, . . . by mistake called ornament.' Next he abandoned the use of the vain phrases that were the ornaments of discourse. Other renunciations followed, as, for instance, 'the giving of flattering titles to men between whom and me there was not any relation to which such titles could pretend to belong.' "

Others besides the Quakers castigated the rich and frivolous, and condemned their vanities. "These periwigs of false-coloured hair," says the preacher, "are utterly unlawful and are condemned by Christ himself, who says 'no man can make one hair white or black.' " Women did not escape criticism. Sermons, pamphlets and ballads all poured scorn on their expensive tastes and artificiality The use of cosmetics came in for its share in the general condemnation. "To improve on nature argued dissatisfaction with God's work, and was held to be proof positive of sinful lusts," says Davies.

THE WOOLLEN INDUSTRY

The making of cloth, like the growing of food, is one of the earliest economic activities of man At a primitive economic level, the raw materials are produced in the ordinary course of farming, and the same labour which handles the wool or the flax tills the fields. For many centuries there was therefore a very intimate connexion between the making of clothes and the growing of food. Moreover, so long as the tool employed, distaff or spinning-wheel or loom, was simple and could be worked by hand, the industry remained dispersed. There was no great advantage in concentration. In the Middle Ages, the woollen industry was carried on in most counties of England; and as early as the reigns of Henry I and II there were weavers' guilds in London, Oxford, Lincoln, Nottingham, York and Huntingdon. Most villages had at least one weaver, and every cottage had a distaff. Spinning was an occupation that employed the leisure hours of women of all classes (Fig. 15).

The cloth used by the masses for clothing in these early days was coarse. At quite an early date some districts, like the West Country and Yorkshire, were specializing in weaving, possibly because of their suitability for sheep rearing and to the number of streams which supplied abundant water for the main processes of cloth-making. By the fifteenth century the woollen industry was so important that export of cloth, handled by a corporation called the Merchant Adventurers, had become the chief item in England's foreign trade. Lipson tells us (*Economic History*, i, 403) that in 1355 between five and six thousand cloths were exported; at the end of the fifteenth century the Merchant Adventurers alone were shipping abroad annually some 60,000 cloths; in 1509, 84,789; and in 1547, 122,354.

In Scotland the cloth industry was of much less importance, and its products vastly inferior to those of the sister kingdom; but there were guilds of weavers in all the important towns, and the processes of manufacture were much the same as in England. The Edinburgh weavers were incorporated in 1475, and they were followed in 1500 by the waulkers, the shearmen, and the tailors Cloth manufactured in the Royal Burghs was mostly exported to be finished by the skilful hands of the Flemings. Throughout the country districts, spinning was still a common occupation, and every village had its weaver. The coarse grey cloth manufactured was the common dress material of the country folk. The Scots also grew flax and made linen cloth. This industry was also widely dispersed throughout the country.

THE RESTORATION AND DRESS

The severe style of the Puritans and their condemnation of ostentation was a protest on the part of the new middle class, from which Puritans were mostly drawn, against the luxury and extravagance of the idle rich. Their closely cut hair and high-crowned hats marked them off from the rest of the community, but in other respects their dress differed but little from that of the ordinary folk. Their protest was too violent to be lasting. Moreover, many of them were only too anxious to show their wealth and importance by following the fashions of those whom they regarded as their social betters. In 1660

the upper rung of the middle class was caught up in the orgy of extravagance and luxury that followed the return of the monarchy. Many of them purchased estates of bankrupt royalists, or advanced money to needy landowners. The rise in importance of this class was perhaps the most striking social phenomenon of the seventeenth century. A satirist of 1647, quoted by Davies, writes:

> "I now have liv'd to see the day,
> Wherein a fig-man beares such sway,
> that knights dare scarce sit by him;
> Yea, I have liv'd to see the houre,
> In which a clothier hath such power,
> that lords are glad to buy him
>
> Thus doe the froth of all the earth,
> A spawne sprung from a dunghill birth,
> now prince it in our land
> A people come the Lord knowes how,
> Both fame and nameless till just now,
> must every one command."

Extravagance of dress in the Restoration period was partly a result of the wider diffusion of goods brought from the Far East. The ships of the East India Company reduced transport costs, and did away with the many handlings and sales on the medieval trade routes. Goods now came all the way by sea from India to England; and since they could be carried in bulk, costs fell. With costs fell prices, thus bringing such wares within the purse of a much larger section of the community. Importation of plain calicoes, chintzes, ginghams, cretonnes, silks, carpets, tea, porcelain, and many other things soon brought about a revolution in taste and custom. Writing about 1710, Defoe says these goods

> "crept into our houses, our closets, and bed-chambers, curtains, cushions, chairs, and at last the beds themselves were nothing but calicoes and Indian stuffs."

Cottons were used for underclothing and dresses, while silks were lavishly used by the rich. A writer in 1697 declared that

> "from the greatest Gallants to the meanest Cook Maids nothing was thought so fit to adorn their persons as the Fabricks of India, nor for the ornaments of Chambers like India Skreens, Cabinets, Beds and Hangings, nor for Closets like China and Lacquered Ware."

So great was the popular demand for the fine cloths of the East that the native woollen industry was alarmed. It demanded protection from these Indian fabrics, which they described as "tawdry, pie-spotted, flabby, ragged, low-priced, made by a parcel of heathens and pagans that worship the Devil and work for ½ a day." But the new materials had come to stay, and Manchester was already busy copying them.

KNEE-BREECHES AND HOOPS

The chief changes in fashion during the latter part of the seventeenth and early part of the eighteenth century are easy to discern in pictures of the period. The doublet was gradually lengthened to become a long-skirted coat and the sleeves ended in wide cuffs with deep lace ruffles. Buttons were used in profusion. Waistcoats, elaborately embroidered and adorned, were also very long and they had sleeves, thus resembling the coat rather than the waistcoat of to-day. The wide pantaloons, tightened and fastened at the knee, had become knee-breeches almost hidden by the long coat. Coloured silk stockings, however, were still in full view. Shoes with buckles were common, and for headwear there was, of course, the wig The latter made hats superfluous; but a gentleman always carried his hat if he did not wish to wear it.

"Pretty black beaver tuck'd under the arm,
If placed on his head might keep it too warm."

The hoop was the distinguishing characteristic of women's dress, and it did not lose favour until the French Revolution In the days of Queen Anne it reached enormous dimensions.

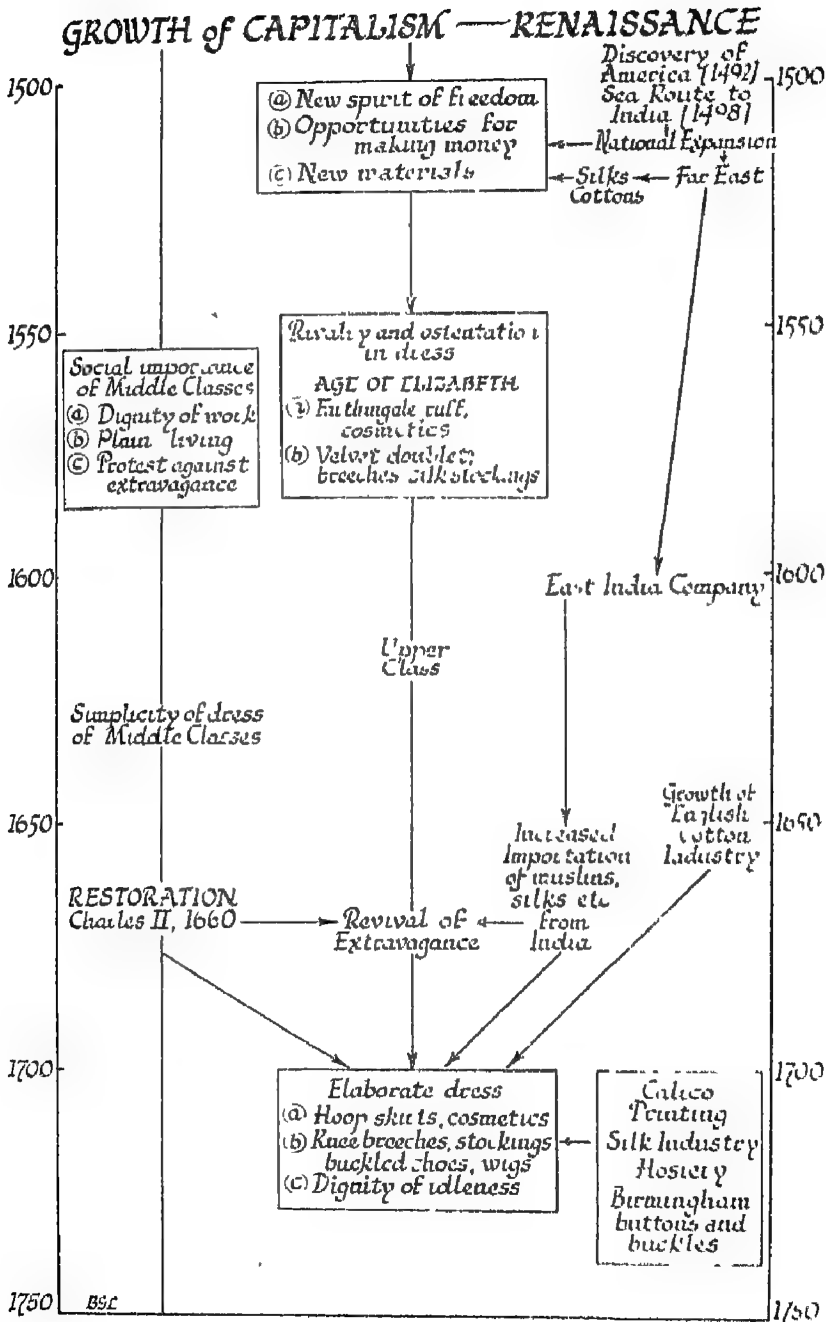
"Several congregations of the best fashion," says the *Spectator*, "find themselves already very much straitened, and if the mode increase, I wish it may not drive many ordinary women into meetings and conventicles. Should our sex at the same time take it into their heads to wear trunk-breeches (as who knows what their indignation at this female treatment may drive them to?), a man and his wife would fill a whole pew."

The church was not the only place where the hoop was an embarrassment. It created a new traffic problem in the streets where hooped ladies struggled to pass each other. Many desperate struggles took place *en route* to a place in the sedan chair. Sometimes the lady found:

"Yet found too late,
The petticoat too wide, the door too strait;
Entrance by force she oft attempts to gain,
Betty's assistance, too, she calls in vain,
The stubborn whalebone bears her back again.
Vex'd at the balk, on foot she trips her way,
For woman's will admits of no delay;
On either side a faithful slave attends,
And safe from harm the Petticoat defends"

(JOSEPH GAY, *The Petticoat.*)

Hamlet's retort to Ophelia would not have been out of place in the eighteenth century—"God has given you one face, and you make yourselves another." Every conceivable cosmetic was *de rigueur*—Dutch Pink, Bavarian



TIME CHART 5: RIVALRY AND DRESS

Red Liquor, Chinese paints, lip salve, and all the paraphernalia of the modern young woman were lavishly used.

"The ladies of St James's
They are so fine and fair,
You'd think a box of essences
Was broken in the air.

"The ladies of St. James's
They're painted to the eyes.
Their white it stays for ever,
Their red it never dies"

(AUSTIN DOBSON)

These extremes of fashion were found among the aristocracy in London, but in the course of the century they spread throughout the country. Provincial families and "small gentry," then as now, looked to London, and always copied the costumes of their social superiors. Seemingly the only way to bridge the social gulf between classes at a time when clothes were so distinctive was to copy the dress of those higher in the social scale. To allow the squire's wife to wear the hoop in splendid isolation was to make the wide gulf between herself and the farmer's wife even wider. In self-defence lesser folk followed fashion, so far as they were able. It is one of the merits of modern clothes that there is relatively little class difference of style. The eighteenth-century farmer's wife who wore a hoop not only gave herself an imposing appearance, but brought herself nearer the higher social class which she respected. If the dairymaid and the wife of the artisan did not wear the full hooped skirt, they disported themselves in yellow and red quilted petticoats, tight-fitting bodices, and pink and blue gowns. The men wore knee-breeches, stockings and shoes, a loose coat with low down collar, usually profusely ornamented with buttons (Fig. 16).

There were complaints, as in Elizabethan days, that emulation of upper-class fashions by the lower ranks of society tended to obliterate distinctions. The *Tatler* lamented that in

"coffee-houses and public places, my brethren, the tradesmen of this city, put off the smooth, even, and ancient decorum of thriving citizens for a fantastical dress and figure improper for their persons and characters, to the utter destruction of that order and distinction which of right ought to be between St. James's and Milk Street, the Camp and Cheapside."

Such fears were groundless. The elaborate fashions of the time were ill-suited to the workaday lives of the ordinary people. If the women affected the hoop, it was a modest one. If the men wore knee-breeches and long coats, they were plain and lacked the embellishments of those worn by the middle and upper classes. The agricultural worker still wore his coarse woollen and linen smock. The countryside had changed but little since medieval times. (See G. Hill, *A History of English Dress*, 1893, ii)

SCOTTISH DRESS

Among the well-to-do in Scotland, highly-decorated hooped skirts, knee-breeches, elaborate coats and wigs were the fashion. Merchants and students who had been to Holland brought in the fashion of wearing lace, fine linens and silks. Writing in 1729, Macintosh of Borlum says, "Where I saw the gentleman, lady and children dressed clean and neat in homespun stuffs of her own sheep's growth and women's spinning, I see now the ladies dressed in French and Italian silks and brocades and the laird and his son in English broadcloth" (*Essay on Enclosing*, 232). The Scots, however, were not willing to allow this development to go unchecked. *The Society of Improvers in the Knowledge of Agriculture*, which had been founded in 1723, started a "Buy Scottish" campaign. On the suggestion of the Duke of Hamilton, the Society ordained that all members should popularize Scots linen cloth by influence and example. "All of you," he said, "and all under your influence, should, for examples to others buy no foreign Linen for Shirting, Bed-Linen, or any other Household furniture; and that you should propagate, to the utmost of your power the wearing of home-made stamped Linen " This "Buy Scottish" campaign caught on, and it became the fashion at all social gatherings for people to wear clothes of Scots manufacture.

"I remember," wrote Miss Mure of Caldwell, "in the 30 or 31 (1730 or 1731) of a ball where it was agreed that the company should be dress'd in nothing but what was manufactur'd in the country. My sisters were as well dress'd as any, and their gowns were strip'd linen at 2s. and 6d. per yard. Their heads and ruffles of Paisly muslings at 4 and sixpence, with four peny edging from Hamilton; all of them the finest that could be had "

The Union of the English and Scottish Parliaments in 1707 had aroused little enthusiasm in Scotland, and when industrial depression followed the establishment of free trade with England, the Scots were disillusioned and resentful. Hence the move of nationalism which the Society of Improvers sought to capitalize. Withstanding the spread of foreign fashion, the Scots continued to cling to their characteristic dress. Until the middle of the century the plaid, made of homespun wool, with warp and weft of different colours, was worn by all classes. It was thrown loosely over the shoulders or over the head. "In 1747, when I first knew Edinburgh," says John Ramsay of Ochtertyre, "nine-tenths of the ladies still wore plaids, especially at church. By this time, however, silk or velvet cloaks, of one form or another, were much in request with people of fashion, and so rapidly did the plaid wear out, that when I returned to Edinburgh in 1752 one could hardly see a lady in that piece of dress. For a while they were retained by matrons attached to old modes, and by the lower classes of people; but in the course of seven or eight years the very servant-maids were ashamed of being seen in that ugly antiquated garb" (*Scotland and Scotsmen*, 1888, ii, 87). When a Fifeshire minister wrote an account of his parish in 1793, he reported that "the plaid is now almost wholly laid aside by the women, and the use of the cloak and bonnet have become general (*Old Statistical Account*, v, 392).

Another minister writing at the same time says:

"The inhabitants of this parish . . . have a taste for dress, and young women of the middle, and even of the lower ranks, would now blush to be seen in the blue cloaks, red plaids, and plain caps, which only twenty years ago, adorned their sex. Nay, even the scarlet mantle, which lately was a badge of distinction among the daughters of farmers, is now despised, and *O tempora! O mores!* the silk-worms of the East must be pillaged, to deck the heads and shoulders of our milk-maids" (*Old Statistical Account*, v, 403).

Other characteristic features of Scots dress were the tartan trews and the kilt. The former is an ancient garment, and is said to have been worn by the Celts in Roman times.* Though it had long since been abandoned elsewhere, it continued to be worn in the Scottish Highlands. Tartan trews were part of the dress of James V when he went to the Highlands in 1538, and according to Defoe the Highlanders who invaded England in 1639 wore

"a cap on their heads, called by them a bonnet, long hanging sleeves behind, and their doublet, breeches, and stockings, of a stuff they called plaid, striped across red and yellow, with short cloaks of the same" (Figs 17 and 18).

In the eighteenth century, trews were a mark of distinction and were worn by "gentlemen," while the kilt which appears to have grown out of the plaid was the dress of the common people. In a *Journey through Scotland* in 1723, the author thus describes the Highland Fair at Crieff: "The Highland Gentlemen were mighty civil, dressed in their slash'd short Waistcoats, a Trousing (which is, Breeches and Stockings of one Piece of strip'd Stuff) with a Plaid for a Cloak, and a blue Bonnet." Of the common people he says, "Their attendance was very numerous, all in Belted Plaids, girt like Women's Petticoats down to the knee, their Thighs and half of the Leg all bare." These common people were the drovers who hired themselves at a shilling a day to drive the cattle to England Before the end of the century, both men and women were discarding their ancient native costume for a more anglicized style of apparel. An Ayrshire minister writing in 1793 says:

"The bonnet-makers of Kilmarnock no longer find demand for their manufacture, from the servant men and labourers in this part of the country, but hats are worn both by men and boys of all ranks Our young men are not to be seen, at church, or market, in a coat of their mother's spinning, but dress themselves in English broad cloths, fashionable cotton stripes, and fine linen. Every stripling, as soon as he arrives at puberty, must have a watch in his pocket; whereas, only forty-two years ago, there were but three in the parish" (*Ibid*, v, 404).

DRESS AND INDUSTRY

The new fashions influenced and were influenced by the clothing industries. In the seventeenth century Lancashire was laying the foundations of the cotton industry. At first, raw cotton from Cyprus, Smyrna and the Levant was spun, and a coarse cloth called fustian, half cotton and half linen, was made. How early pure cotton goods were made is uncertain, but it is probable

* *Scottish Historical Review*, i, 389.

that until well into the eighteenth century most weavers used cotton and linen.*

The custom of weaving cotton was stimulated by the importation of Indian products. Before 1700 the various East India companies and the interloper traders were pouring Indian cottons and silks into Europe, and there was hardly a country that did not view with alarm the decay of its native woollen industry. English pamphlets were loud in their denunciations of the foreign trash. "Cotton is as fine and soft as Wool, it may be spun as small or as large, it may be Milled and Drest, it may be Dyed and Stained, and when the English merchant shall send over Cloth-Weavers and Dyers, and Throwsters, as well as Silk, I question not but we shall have Cotton-Cloth and Knaves enough to make it a Fashion and Fools enough to wear it," said one writer. Nevertheless the new cotton goods caught on. The extent of the popularity may be seen from the inventory of a Preston draper in 1688, quoted by Wadsworth and Mann There were for sale white calico buckram at under a shilling a yard; white calico, printed and glazed calico at 1s. 1d.; brown calico at 10d ; black, blue, and "coloured" calico at 11d ; broad glazed calico at 1s.; stained calico at 1s 2d. and 1s.; narrow flowered calico at 9d.; and, finally, coloured calico at 1s. 7½d.

The calico-printing industry, fostered by the importation of plain calicoes from the East, was a significant development of the closing years of the seventeenth century. Hitherto, designs had been executed by hand and were accordingly expensive Now elaborate designs could be printed cheaply. Women's clothes became gayer About 1690 the woollen manufacturers began to agitate against the use of Indian goods, and so strong was their influence that in 1701 an Act was passed forbidding "the use and wear, in any form, of Indian and Chinese silks, and of Indian printed or painted calicoes and striped or checked cottons." This, it will be noticed, did not prevent the importation of plain calicoes and the printing of them in England. The printing industry naturally took full advantage of this Act, so much so that in 1707 the woollen manufacturers were complaining of its competition as "more prejudicial to us than the importation of painted calicoes was before the passing of that Act For whereas then the calicoes painted in India were most used by the richer sort of people whilst the poor continued to wear and use our woollen goods, the calicoes now painted in England are so very cheap and so much the fashion that persons of all qualities and degrees clothe themselves and furnish their houses in a great measure with them" (Mann, 133). Printed calicoes were used for frocks, aprons, quilts, and other articles. In the interests of the ancient woollen industry, Parliament imposed excise duties on printed linens and at double the rate on printed calicoes From time to time, these duties were increased, and though this checked the sale of such articles, the woollen manufacturers were still dissatisfied In the depression of 1719 the agitation was renewed on an extensive scale.

"The woollen and silk industries," says Miss Mann, "throughout England joined in an agitation which launched nearly a hundred petitions at the

* For the history of this industry, see Wadsworth and Mann, *The Cotton Trade and Industrial Lancashire*, 1931.

*

head of Parliament The Commons passed a prohibition bill but the Lords, always sympathetic to the interests of the East India Company, temporised; and the session ended without anything being accomplished. The agitation, however, was kept up, and when Parliament next met, the stagnation caused by the bursting of the Bubble gave ample ground for complaints. The silk and woollen manufacturers finally secured their aim in the well-known Act of 1721."

This Act prohibited the use and wear of any kind of calico, except calicoes dyed blue which were probably used for aprons and smock frocks. As a concession to the East India Company, muslins and neckcloths were not included in the prohibition, but, more important, the home-produced fustians were also excluded. The woollen manufacturers had perhaps no great reason to be satisfied with this Act. Muslins could still be imported, and the coarse cottons of Manchester could be produced and sold without restriction. The cotton industry, therefore, continued to expand; and every year saw encroachment of its products on the field of the older textile industry. When doubts were expressed about whether these home-produced goods should come under the prohibition of the 1721 Act, the matter was settled by Parliament in favour of Manchester. Before the close of the century the cotton industry had become England's greatest industry. As a consequence of Arkwright's invention (1769), spinning-wheels gave place to power-driven machinery; the mill took the place of the cottage kitchen or the garret. Crompton's mule, soon adapted to power, made possible the spinning of fine thread. So Lancashire was able to rival the fine cloths of India.

The great output of cotton cloth gave full scope to the changing fashions of the time. Woollen and linen underclothing were discarded for a more hygienic substitute Cotton and muslins now became the rage for women's dresses. Though still expanding, the woollen industry was soon completely overshadowed by this great new textile.

In Scotland, as in England, the cotton industry caught on, especially after the inventions of Arkwright and Crompton. Nowadays, one does not usually associate the Clyde Valley with the cotton industry, but Glasgow, Lanarkshire and Renfrewshire were full of cotton mills in 1800 Cotton manufacture was Scotland's premier industry. In 1775 the import of cotton to the Clyde was a mere 137,160 lb. In 1790 it was 1¾m; and in 1810, 10m lb. The *Statistical Account of Scotland* (1791–9), a work of national stocktaking in twenty-one volumes, embracing an account of every parish in Scotland, is full of references to the remarkable expansion of this new industry. The older linen industry felt the full brunt of competition. Many manufacturers like those in Glasgow and its surroundings turned from making lawns and cambrics to the manufacture of the more popular and more profitable textile, especially muslin. Macpherson in his *Annals of Commerce* (1785) writes:

"Now cotton yarn is cheaper than linen yarn, and cotton goods are very much used in place of cambrics, lawns, and other expensive fabrics of flax, and they have almost totally superseded the silks. Women of all ranks, from the highest to the lowest, are clothed in British manufactures of cotton, from the muslin cap on the crown of the head to the cotton stockings under the sole

of the foot . . . With the gentlemen cotton stuffs for waistcoats have almost superseded woollen cloths, and silk stuffs, I believe, entirely" (iv, 80).

Silk, of course, was in great demand in the eighteenth century, especially by the middle and upper classes. After the Restoration, the English silk industry, which had a long history, received a stimulus from the immigration of French silk-workers settled at Spitalfields. They specialized in the manufacture of lustrings and *à-la-modes*—the silks then in greatest demand. Largely through their influence, Parliament prohibited the import of continental or Far Eastern silk. About 1718 the industry was greatly strengthened by Thomas Lombe's invention of a silk-throwing machine which made possible the factory production of fine silks. Aided by protection and up-to-date technique, the silk industry of Macclesfield, Stockport and Manchester advanced, but, being subject to the vagaries of fashion, it had many ups and downs. Moreover, in spite of the protection afforded by the Government, French silks in large quantities were smuggled into England.

"Nothing that is mere English goes down with our modern ladies. . . . They must be equipped from Paris," said a writer, in 1707.

Scotland had no silk industry, but it had another industry which was built on the shifting sands of fashion. This was the stocking manufacture for which Aberdeenshire was famous in the eighteenth century. Down to the sixteenth century, stockings were usually made of cloth. It is recorded that Elizabeth received a gift of Spanish knitted stockings, and was so pleased with them that she never wore cloth ones again. The art of knitting stockings quickly spread throughout country districts. In Yorkshire it linked up with the woollen industry, and it also flourished in Norfolk. Aberdeenshire was the great centre of this industry in Scotland, where the knitting of stockings replaced the making of plaids about the time of the Union. When Edmund Calamy visited Aberdeen in 1709, he saw "the finest knit worsted stockings anywhere to be met with. I heard of some," he says, "at five guineas a pair, the beauty of which is best seen through glasses. Those of two guineas a pair are very common." According to Pennant (1769), 70,000 dozen stockings were produced annually, worth on the average thirty shillings a dozen. In Orkney and Shetland, stocking-knitting was also important. It has remained so to the present day. In the reign of Elizabeth, James Lee invented a knitting-machine called the stocking-frame. At first used for making worsted stockings, it was later adapted to the finer work of making silk stockings in London. Not until the eighteenth century, however, when the weaving of silk stockings and fancy waistcoats was general, did the stocking-frame really catch on. Nottingham and Manchester were the only centres of the industry. Scotland first successfully employed such frames at Hawick in 1771; but cheap hand labour prevented their general adoption for another fifty years.

Buttons and buckles were necessary adjuncts to eighteenth-century dress, and their manufacture constituted two closely allied and important trades in Birmingham and other parts of the Midlands. Shortly after the Restoration, Birmingham buttons were well known. They were generally made of brass, and on the introduction of the process of plating about 1750, great variety

was introduced into their finish. Buckle-making also made its appearance in the Midlands before 1700, and throughout the eighteenth century it was one of the important trades of Birmingham. Before 1800, however, fashions changed. Shoe-strings took the place of buckles. Umbrellas appear to have been first used in England in the late seventeenth century, but they were not generally adopted before 1777. Many were the satirist's prints showing the growing popularity of the new weapon.

THE INFLUENCE OF THE FRENCH REVOLUTION

The two major influences in nineteenth-century history have been the French Revolution and the Industrial Revolution. The doctrine of Liberty, Equality, Fraternity, which resounded from every Parisian platform, struck a blow not only at the *ancien régime* in France, but at the class structure and social outlook of the British people. Though feudal society in this country had long since been undermined by the rise of a new middle class associated with the growth of capitalism, the class basis of society had changed but little. Mercantile pursuits were still frowned on by the landed aristocracy, and the *nouveaux riches* were unwelcome guests in the ranks of the old families, though marriage and wealth gave the more prosperous merchants the means to bridge the gulf. The process of recruitment went on continuously in the two centuries before 1800, infusing new life into the ranks of the old aristocracy. It still goes on to-day. Before the Industrial Revolution, however, the *parvenus* were socially and economically weaker as a class than those with whom they wished to associate. They therefore absorbed the social outlook of the latter, and with it a recognition of rigid class distinction, as also of the dignity of idleness and display. The Puritan Revolution was a protest against this view: but its influence was weak and short-lived. The highly decorative dress of the eighteenth century eloquently proclaims distinction of rank and wealth.

This was especially true in France, where class distinctions were much more rigid and an essentially feudal society still survived. Revulsion of feeling against the caste system was one of the main features of the French Revolution. The outward form of this *ancien régime* was costly and extravagant dress. Clothes were the badge of class—the symbol of wealth and rank, and as such were inescapably anathema to those who preached the doctrine of equality and the brotherhood of man. Only through greater uniformity and simplicity of dress could the common humanity of man find expression. When the French Revolution banished differences of rank, ornamentation disappeared from clothes. Rich and poor dressed alike. Any distinction in clothes was suspect, and liable to lead the wearer to the guillotine. For a time, wealthy men wore the blue linen pantaloons and short jacket of the working man; and the general effect of the Revolution on men's clothes was to encourage uniformity and simplicity. Breeches were gradually lengthened until by 1800 they were full length, though the lower part was hidden by the high boots which had now replaced shoes. In the course of the next ten years men began to wear trousers long enough to cover the legs, with straps passed under the soles of the boots. There was little change in the coat, except that it was less ornate. Wigs and powder had disappeared, and the round hat gradually

gained in favour. By 1812 it had become the common headgear of the educated classes through almost the whole of Europe (see *A History of Costume*, by Carl Kohler, translated by Alexander K Dallas, 1928, 374 f.)

The Frenchwoman's dress underwent a still more revolutionary change, which gained its inspiration from Greek models.

"The Greek chiton, or tunic (a garment after the style of the chemise then worn by Englishwomen), was selected as the type of the new dress movement, which reached its climax in the year 1800, with its *costume à la sauvage*. All underclothing was discarded, breast and arms were bare Only the thinnest possible materials were used to make these garments, below which were worn close-fitting, flesh-coloured tights, with brightly coloured insertions and garters," says Kohler (376)

The style of dress in Britain was profoundly affected by the French Revolution Women garbed themselves in one-piece dresses, made of muslin or lawn, divided into skirt and bodice by a cord or ribbon tied below the breasts. Thus arrayed, they braved the elements without any other protection than the pelisse. Caricaturists delighted to picture the revelation of women's figures following a slight shower of rain This extreme and simple style did not long persist. At the beginning of the new century women began to wear a second garment over it, a sort of tunic, and ornament came into its own. Ruffs made of Brabant lace, called Betsies after Queen Elizabeth, appeared in 1801; soon puff sleeves and other elaborate fashions proclaimed the intention of women to desert the simplicity of revolutionary days. Meantime, men's fashions underwent an abrupt change. The most interesting feature was the general adoption of trousers in the second decade of the century. They remained unchallenged until the coming of knickerbockers at the close of the Victorian era. Wigs went out with powder, and the tall hat began its remarkable vogue. Only in detail did the coat change. The general trend was to plainness and uniformity.

CLOTHES AND THE NEW SOCIAL ORDER

At this point we may well ask the following question. Why did men steadily pursue th path of plainness and uniformity, eschewing embellishments in which they had delighted before 1800, while women returned to the ornamental soon after the first flush of the French Revolution? The social historian cannot give a complete answer to this question Unexplored psychological factors enter into the situation; but a major relevant circumstance appears to have been the contemporary revolution of industry. The rapid industrialization of Great Britain at this time deeply influenced social relationships The landed aristocracy, hitherto the leaders in politics and fashion, in taste and social standards, took second place to a new industrial and commercial personnel.

The triumph of the new society was registered in the Reform Act of 1832 which gave the vote to the middle classes and political representation to the new industrial towns It was not only in politics that industrial interests made their influence felt. The view of the industrialist coloured the whole outlook of society. Work was now regarded as honourable, and profit the hallmark

of success and social usefulness. To live laborious days in the factory or the office, to plough back into industry the profits of business, to measure one's social importance not by lavish ornament and vulgar ostentation, but by frugal living and carefully invested capital, were the new standards Elegance in the drawing-room or distinction in the army, for which expensive and elaborate dress was decreed by tradition, were perhaps the only worthwhile achievements, according to the standards of the old order. The French Revolution and the revolution of industrial technique alike gave a new dignity to labour—a dignity which was expressed not in gorgeous garments, but in plain serviceable dress. The importance of economic activity in this new age gave prestige to labour, and the standards adopted by the industrial interests were gradually accepted by society.

"For there is a perennial nobleness, and even sacredness, in Work," wrote Carlyle in *Past and Present*. "Were he never so benighted, forgetful of his high calling, there is always hope in a man that actually and earnestly works: in Idleness alone is there perpetual despair. Work, never so Mammonish, mean, *is* in communication with Nature; the real desire to get Work done will itself lead one more and more to truth, to Nature's appointments and regulations, which are truth.

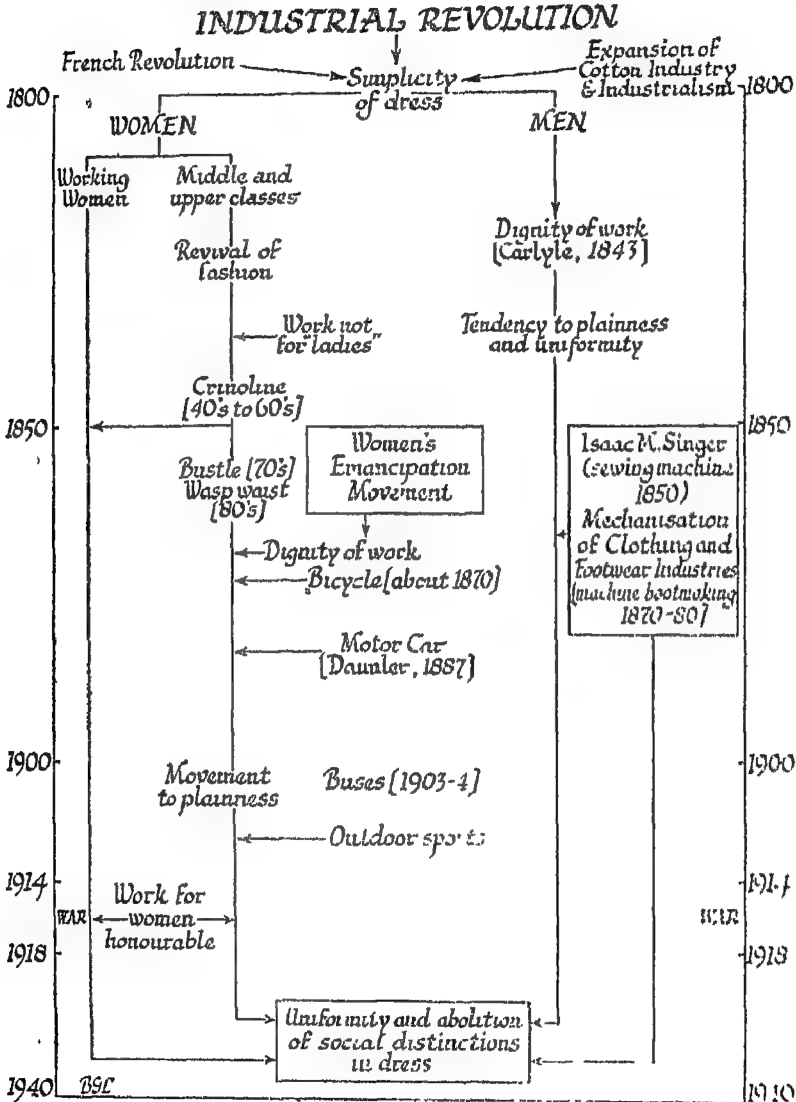
"The latest Gospel in this world is, Know thy work and do it. 'Know thyself': long enough has that poor 'self' of thine tormented thee; thou wilt never get to 'know' it, I believe! Think it not thy business, this of knowing thyself; thou art an unknowable individual: know what thou canst work at; and work at it, like a Hercules! That will be thy better plan"

The change of outlook was reflected in dress, in so far as it tended to become more serviceable and uniform. The bright colours and elaborate costume of the old aristocracy gave place to dull colours and plain dress. By 1830 black had established itself for business and professional wear, but for sports and social affairs a great variety of colour—green, blue and brown—was still the rule. The culmination of the tendency to uniformity is seen to-day. In general, it is no longer easy to distinguish one's class by clothes. This is specially true of men's evening wear, as worn at dinners by diplomats and trade union leaders or at dances by mechanics and merchant princes. The slightest departure from the norm at once attracts attention, to the great embarrassment of the wearer. It is also true of women's dress that the drift has been to uniformity and plainness. But it has been a slower process.

We have seen that women soon tired of the Spartan plainness of the French Revolution, and by the twenties they were once more intent on ornament. The wearing of Cashmere and Paisley Shawls of brilliant hue and elaborate design was typical of the trend. Artificiality reached its height in the crinoline of mid-Victorian days. By the forties, women's skirts were full and padded and were supported on masses of petticoats Four or six petticoats were quite normal, and while they must have been a blessing to the naturally unshapely, they were obviously a burden to all. At this point the crinoline with its wire hoops was a "physical and mechanical necessity" (Fig 19).

"It was in the early 'sixties," says Laver (*English Costume of the Nineteenth Century*, 1929, 56), "that the crinoline achieved its most astonishing propor-

tions. Woman's form was reduced to an isosceles triangle, for even the narrowness of the waist was concealed by the width of sleeves or the amplitude of cloaks. The effect was completed by the smallness of the head-wear, with the hair confined in close-fitting bonnets tied with a bow under the chin. A pretty



TIME CHART 6: TOWARDS UNIFORMITY IN DRESS

face was all that was needed to be irresistible, for every other portion of the female figure was most effectively concealed."

It would be tedious to follow all the changes in women's fashions in the nineteenth century—from crinoline to bustle, which had an astonishing run

in the seventies, and after almost disappearing in 1880 returned several years later; the wasp waist at its height in the 1880's; the vogue for Scottish plaid materials, and so on Several circumstances have combined to pack into the present century revolutionary changes in women's clothes. Modern transport facilities—railway, bicycles, and motor-cars—have widened social contacts and helped to soften or eliminate extremes in dress, ill-suited to movement and speed. The passion for outdoor sports operated in the same direction, and was having a profound effect on dress before 1914. The war of 1914–18 reinforced these and other forces operating to the same end. Most important of them all was woman's emancipation.

From the beginning of the industrial era, women of the wage-earning class had been employed in factories or as domestic servants, but until the twentieth century all others regarded the home as their sphere and marriage their vocation. Content to recognize the superiority of the male, they were excluded from all participation in public affairs or in the learned professions. The emancipation movement had already made considerable headway when the First World War came to complete the process. Women of all classes hastened to throw off the prejudices of centuries in their zeal to render some useful service outside the home. Work was now as honourable for women as for men. They took their place in the office, in the shop, and in the professions. The smarter and more serviceable clothes they now wore were dictated by the new environment in which they spent the best part of their day.

Another circumstance has contributed to the dress revolution Advances in the technique of industry, involving mass production and cheaper products, the development of the ready-made tailoring trade, and the production of synthetic products such as artificial silk, have enabled the masses of the people to buy clothes more frequently, and to wear clothes which bear the mark of expert cut and tailoring The dress of women in business is now almost as "correct" as the sober dark suits of men. Modern life is fast abolishing sartorial distinctions of rank and wealth It is also tending to abolish physical distinctions. Better food, better housing, and open-air activities are all playing their part in raising the dignity of human life.

Will this result in a dull uniformity of dress for all? It is unlikely, but the differences in dress need no longer portray differences of wealth Before the industrial era, craftsmen often wore clothes which had an occupational basis. The guilds had their liveries The farm-worker had his smock The apprentices had their blue coats and flat caps, and the metal-workers their leather aprons. All this has gone, though it is noticeable that many vocations still prescribe a sort of occupational dress: the shop assistant with his black jacket and striped trousers, the shop girl with her black satin dress, the business magnate with his absurd silk hat and dress coat. Tramway conductors, railway guards, domestic servants, postmen, lift attendants and cinema commissionaires have characteristic uniforms.

The wearing of uniform curtails freedom of individual taste Personality tends to disappear in the formal relationship of subordinate and superior, of employer and employed. Hence the general desire during the leisure hours to wear plus-fours, flannel trousers or sports jackets, or anything indeed which will be an escape from the formal clothes of work. The variety thus

introduced has, of course, no basis in wealth or class. The business man delights in his plus-fours no less than his junior clerk Girls in factories may be sensibly dressed in overalls and dust-caps, but when they go home they at once assume garments which no longer symbolize occupation or class, but equality among women. Thus advances in the technique of production have enormously increased man's power to produce classless clothes.

That large numbers of people are inadequately clothed is due to poverty. It is clearly not due to our lack of power to produce the goods. A national move to provide everyone with proper clothes would set every mill in the country at work. For there is not only enormous leeway to make up in the production of ordinary suits and footwear, but in underclothing which, since out of sight, is often more neglected, more tawdry and more inefficient for its purpose than outward garments. Moreover, many classes of workers, like miners, factory employees, dock labourers, agricultural workers, lack suitable working clothes.

"Every worker in a soundly organized community should have proper working clothes, and by that I mean not simply overalls, but such underclothes as are best for him to toil and sweat in," says H. G. Wells (*The Work, Wealth and Happiness of Mankind*, 195) "I doubt if the expense and trouble of procuring this working costume should be left to him. They are the concern of the efficiency-seeking director as much as the space and lighting of his work-place"

THE CLOTHING INDUSTRY

The chief change in dress material during the industrial revolution period was the substitution of cotton for wool and linen. Under the stimulus of a rapidly expanding market and power production, this industry grew at a phenomenal rate In 1817 there were 6½m spindles in Britain; in 1885 about 42½m, and in 1914, 59m At first, machinery was confined to the spinning-mills, but in the course of the first forty years of the century the power-loom, first invented by Cartwright in 1787, was gradually improved From the weaving of coarse cloth it extended its sphere of usefulness. As it took over the manufacture of finer fabrics, the hand-loom weavers were driven to the wall, because the power-loom had a much greater productive capacity than the old hand-loom. According to an estimate of 1833, quoted by Heaton, a hand-weaver made two cloths per week, but a "steam-weaver" aided by a twelve-year old girl could attend four looms and could weave eighteen to twenty pieces in the same time Many improvements were introduced in the power-loom, and at the end of the century an automatic loom was invented which halved the cost of weaving plain fabrics. It made little headway in Lancashire, which produced high-grade cloths, but it has been extensively adopted in America and Japan.

In the course of the Victorian era the cheapening products of Lancashire brought within the means of the masses an ever-increasing quantity of cotton goods. At the turn of the century scientific investigation was pointing the way to the production of artificial silk from wood pulp In 1884 a Frenchman, the Count de Chardonnet, took out a patent for a fibre which the French called "chardonnet," and in 1900 artificial silk or *rayon* was shown at the Paris

Exhibition. Especially after the war of 1914–18 there was a boom in the production of this new material which rivalled silk as well as fine cotton cloth.

The woollen industry, for centuries England's greatest industry, lost its position of supremacy with the coming of cotton. The displacement of woollen and linen underclothing naturally limited the development of the older textile. But there were other reasons. The new textile machinery was not readily adaptable to the manufacture of woollen cloth, and so it was not until about 1860 that the factory system really took hold of this industry; though the new methods of manufacture were adopted earlier in the worsted section. One reason was that the woollen industry for centuries had been dependent on home sources for its raw material, and these sources could not be rapidly expanded. After 1830 the problem of raw materials was solved by the entry of Australia, New Zealand and the Cape into the market. The progress of the woollen industry, therefore, was more rapid in late Victorian days because better machinery and more abundant raw materials were available. The change in habits which led to the revival of woollen underclothing in place of cotton helped the industry; as did the wearing of trousers. In Scotland this industry was chiefly carried on in the Lowlands around Galashiels, Hawick and Jedburgh, as well as further north at Stirling, Clackmannan and Aberdeen. Here and there some woollen cloth was made in many parts of the Highlands.

With the change of fashion from stockings and breeches to socks and trousers, the hosiery industry fell on evil days. In an official Report of 1845 (*Report of the Commissioners on the Condition of the Framework Knitters*), the picture painted of this industry was one of unrelieved gloom—stagnation in the woollen and worsted branches and rapid decline in the silk branch. Like the Paisley weavers of a later date, they were suffering not from the competition of machinery, but from a change of taste. Towards the middle of the century manufacturers turned to the production of socks and knitted underwear. Here was a market they could develop. Technical progress was rapid. According to Wells, factory production had fairly begun by 1860 in Nottingham and Leicester. In the next decade or so the factory system had replaced the small workshop.

Ready-made clothing manufacture, as well as the boot and shoe trade, depended for its astonishing progress on the invention of machinery. About 1820 a Frenchman invented a sewing-machine, but owing to opposition of the Parisian seamstresses, as well as to the defective nature of the machine itself, its adoption was delayed. In 1846 an American, Elias Howe, produced an improved one. In the year of the Great Exhibition there were about 340,000 milliners, dressmakers and seamstresses in Great Britain, who still sewed by hand, as did the 270,000 shoemakers. At the American section of the 1851 Exhibition, the *Economist* reported that "there is a sewing-machine which works with astonishing velocity."* In the course of the next decade its manufacture was perfected in America, and large numbers were soon exported to Europe.

Leeds led the way in the ready-made clothing trade to adoption of machinery, now being produced by the Singer Company of New York.

* Clapham, ii, 13.

"There, as elsewhere," says Clapham, "the thing started simply, obviously, but obscurely when some enterprising man bought a batch of hand-sewing machines and set girls to work them. By 1863 one of the pioneers at Leeds had 50 girl machinists on his premises and 200–300 female outworkers. From some such simple beginning, at first without any use of power, and in close touch with contemporary developments in America, the complete factory evolved in the course of the next twenty-five years—borrowing devices from other industries and perfecting the uses of its own characteristic implement, the sewing-machine" (ii, 92).

Machinery gradually invaded the boot and shoe trade. In 1835–6 the Singer Company of New York was pushing a machine for sewing leather, but its adoption in Britain was slow. From light work, however, machine methods slowly spread to heavy work. Most of the inventions and the workers themselves came from America, where "the full team system" of shoemaking was worked out. One process after another was adapted to machinery. In the eighties "each stage of bootmaking had its team of machines, often simple ones easily replaced by hand-processes in small factories; each team, of machines or processes, had its specialists with their new names—heel-builder, heel-breaster, heel-attacher, and the like" (Clapham, ii, 95). A great deal of home work still remained, though the small shoemaker with his last, his wax, his awls and nails was fighting a losing battle.

Machinery and modern methods of large-scale production have enormously increased our capacity to produce clothes of all kinds. Moreover, the problem of providing everyone with clothes which will give protection from the elements and be serviceable in their different uses is urgent. We do not lack the material or the machinery or the skill for production. It is rather that the price-mechanism of capitalism does not operate to satisfy human needs, unless backed with money. When the armed forces require uniforms and boots we set our productive machine to work to provide them. We do not allow mills to stand idle because the government cannot afford to buy cloth. Every mill, every machine, every man is pressed into service to satisfy the needs of the armed forces. In such an emergency, the whole apparatus of the price mechanism and the profit motive go by the board. In peace time, it is true, there is not the same urge, not the same mass enthusiasm to get things done. Yet now that the war is over we have to face up to the problem of the failure of the ordinary forces of demand and supply. In rationalizing our economic society we have to plan production to satisfy urgent human needs and make full use of the vast potentialities of modern industry.

CHAPTER V

HEALTH AND PHYSICK

THE foregoing chapters have dealt with a record of progress in making available means of satisfying certain basic human requirements. The word *health* summarizes the totality of our common needs. So this part of our narrative must take stock of the record of health in the homeland

The origin of modern health services and medical studies takes us back to the monasteries and to the universities of medieval Europe From the sixth century when the religious order of Benedict of Nursia set the standard in its great monastery of Monte Cassino, care of the sick became a function of the monks. Many of the great hospitals of to-day derive their origin from these ancient monastic houses. In Britain, St. Thomas's Hospital traces its history to a monastic charity of the thirteenth century, and the famous St. Bartholomew's claims an even earlier origin The monasteries and monastic hospitals were little more than places of refuge and succour for the weary and footsore, but they fostered a tradition which helped the study of medicine to gain a foothold in the medieval universities, where they kept alive the fruits of Alexandrian science.

Knowledge of Greek medicine did not come to Europe direct or in the original texts. In the course of the seventh century, Moslem power swept round the eastern, southern and western shores of the Mediterranean, and established itself in Africa, Spain, the Balearic Isles, Corsica, Sardinia and Italy. The Moslems appreciated the scientific learning of the ancient world. They had many of the Greek works translated into Arabic, the common language of Islam. A regular school for the purpose was established in Bagdad. The Arabs also made original contributions to medicine and science. One of the most celebrated writers was Rhaxes (860–932), a native of Basra on the Persian Gulf, who wrote a famous book on *Smallpox and Measles*, translated into many languages, including English It was printed some forty times between 1498 and 1866. Equally famous was Avicenna (980–1037), whose *Canon* retained its place as a textbook of medicine down to the seventeenth century.*

These translations and texts written in Arabic were of little use to Europeans, whose international language was Latin In the task of translation into Latin, Christianity welcomed the services of the Jews. Through their efforts Arabic and Greek medical and scientific knowledge became accessible to the West. With the founding of universities in the twelfth and subsequent centuries, knowledge of medicine spread. In most of them medical schools were founded, and the teaching consisted of readings in Latin from Arabic works. At Bologna, a medical faculty existed as early as 1156 In the same century medical schools were founded at Salerno in South Italy and at Montpellier in South France Little original work was done, though experi-

* On the important contribution of the Arabs to European civilization, see *The Legacy of Islam*, by Arnold and Guillaume, 1931.

mental anatomy made a start at the University of Bologna, and some progress was made elsewhere in surgery, notably by Guy de Chauliac (1300–68) at Montpellier (*Legacy of Islam*, 311). But on the whole medieval medicine, divorced from everyday life, made little advance. The chief merit of the universities and medical schools was that they preserved, though in a garbled form, the fruit of Greek and Arabic science. Not until the sixteenth and seventeenth centuries, when inquiry and observation began to displace tradition and custom, did real progress in medicine and science take place.

URBANIZATION AND CONTAGIOUS DISEASES

The growth of town life generated new problems of public health. When numbers of people lived in close proximity to one another, everyone, rich and poor alike, was liable to infection. "Medically speaking," says Simon (*English Sanitary Institutions*, 1890, 35), "the only important fact in the five centuries which preceded the sixteenth century was the growth of popular apprehensions with regard to Contagions of Disease." Though leprosy had existed in Europe from early times, the Crusades (1100–1300) greatly extended its influence. The popular terror of contracting this loathsome disease led to the segregation of those affected. A Royal Ordinance of 1346 declared that lepers should "within fifteen days betake themselves to places in the country, solitary and notably distant from the said city and suburbs and take up their dwelling there" In London and district there were several leper-houses, as well as in many other parts of the country. North of the Border, where the disease was very common, there were leper-houses at Kingcase in Ayrshire, in Glasgow, in Edinburgh at Liberton (supposed to mean Leper Town), and in Aberdeen Leprosy, as we now know, had not a high degree of infectivity, but the precautions taken with regard to it directed attention to other diseases, such as plague and fevers. Growth of town life and extension of commerce, involving movement of people from one town to another, was the dominant factor in this new outlook. The great epidemic known as the Black Death, which swept across Europe and entered England in 1348, brought the problem very forcibly before the authorities Contagious disease knew no distinction of rich and poor, of lord or peasant, and it was the appreciation of this fact that quickened collective intelligence When the crops stood rotting in the fields for want of labour, when the trade of the town was completely disorganized through illness and death, problems of medicine, in particular problems of contagious diseases, became urgent social issues Only by prompt and drastic action could the safety of the State maintain itself.

Rudimentary public health regulations then enforced were extended in subsequent centuries, especially in Tudor and Stuart times, when plague visited England at frequent intervals. At home, the authorities tried to check the spread of disease by regulations restricting the movement of the infected. The first attempt at isolation and notification was made in 1518 when it was decreed "that the inhabitants of those houses that be, and shall be infected, shall keep in, put out wispes and bear white rods." The year 1543 is noteworthy for the issue of a general code of regulations for London, which contain the germ of subsequent preventive medicine:

"35 Hen. VIII. A Precept issued to the aldermen: That they should cause their beadles to set the sign of the cross on every house which should be afflicted with the plague, and there continue for forty days: That no person who was able to live by himself, and should be afflicted with the plague should go abroad or into any company for one month after his sickness . .

"That every person whose house had been infected should, after a visitation, carry all the straw and (*illegible*) in the night privately into the fields and burn; they should also carry clothes of the infected in the fields to be cured . . .

"That all the streets, lanes, etc. within the wards should be cleansed" (quoted Creighton, *A History of Epidemics in Britain*, 1891, i, 313)

Those who could afford it adopted the sovereign prescription of the time —"get into clean air." Whenever plague became rampant there was an adjournment of Parliament and the Law Courts, and a general suspension of business. The practice of quarantine, which had been successfully employed at Venice in the fourteenth century, was adopted both in England and Scotland. In 1580, when plague was raging in Lisbon, the Lord Mayor of London was authorized to prevent seamen from landing and lodging in the city, and to see that no goods were discharged "until they have had some time for airing" (Simon, 94). A quarantine station was established on the Thames in 1625, when there was a grave risk of infection from Holland. Scotland was not long in following the example of Venice and other foreign towns. As early as 1475 the Island of Inchkeith in the Firth of Forth was being used as a quarantine station, while not long afterwards Aberdeen established lodges on the Links and Gallowhill where the infected or suspected were to remain for forty days. The town records of Scotland abound with illustrations of attempts made by authorities to prevent the spread of infection.

URBANIZATION, SANITATION, AND WATER SUPPLY

Disposal of refuse and supply of fresh water became urgent matters as towns grew in size. It is true that sanitation and water-works are as old as history itself. They go back to Cretan times (*c.* 1900 B.C.). Though the remains of Rome's sewerage and waterworks are still the admiration of modern engineers, such provision was not made in England and Scotland until it became clear that insanitary conditions fostered the spread of disease. This was a consequence of the expansion of town life. The problem of sanitation was first tackled in London, because there it was most urgent. After the Black Death, regulation after regulation was issued to cope with the situation. In 1357, for instance, a Royal Order addressed to the Mayor and Sheriffs relates how Edward III, passing along the river,

"beheld dung and laystalls and other filth accumulated in divers places in the said city upon the bank of the said river," and had "also perceived the fumes and other abominable stenches arising therefrom, from the corruption of which, if tolerated, great peril, as well to the persons dwelling within the said city as to the nobles and others passing along the river, will it is feared arise unless indeed some fitting remedy be speedily provided for the same" (Simon, 40)

A nuisance which caused considerable annoyance was the careless disposal of the blood and offal from butchers' shops, and this was the occasion of what one might regard as the first Sanitary Act, passed in 1388. It recited: "For that so much Dung and Filth of the Garbage and Intrails as well of Beasts killed as of other Corruptions be cast and put in Ditches, Rivers, and other Waters, and also within many other Places within about and nigh unto divers Cities, Boroughs and Towns of the Realm, and the Suburbs of them, that the Air there is greatly corrupt and infect, and many Maladies and other intolerable Diseases do daily happen." It was ordered that all such filth was to be removed, and that in future persons guilty of such offences would be punished (Creighton, i, 324) In Tudor times many similar regulations were issued, and now we hear for the first time of Commissioners for Sewers.

Sewers were simply open ditches or water-courses which emptied themselves into the Town Ditch or the Thames The Town Ditch, originally constructed for defence, encircled the city, but by Stow's time (*Survey of London*, 1598) it had become "a filthy channel" into which countless sewers poured. For about two centuries after the Norman Conquest, drinking water was obtained from the Thames and its tributary streams. Later on, the streams were banked and reservoirs built. Thence the water passed through channels or conduits, as they were called, to wells and fountains As population grew, additional sources had to be tapped. In 1439, for instance, pipes were laid from springs near Paddington, and at different times, other supplies were brought into service The drying-up of some streams and steady increase of population made it necessary to bring water from more distant sources. In 1544 the City sought parliamentary sanction to acquire land and lay pipes from springs at Hampstead. This Act, passed in 1546, is noteworthy as being the first private Act to give compulsory powers. The Common Council of London was authorized to enter any grounds within five miles of London, where springs were to be found, and to convey the water pipes to the City. Later, private undertakings were floated to bring water from more distant places, for the rapid increase of London's population, estimated in 1590 to be 160,000, made existing sources quite inadequate. In 1609 a company was floated to bring water from Chadwell and Amwell in Hertfordshire. After overcoming a great deal of opposition from landowners who demanded abnormally high prices for land, a channel called the New River was constructed to Islington. This was the origin of the New River reservoir which remains to-day in the borough of Stoke Newington.

Elsewhere in the country the problem of drainage and water supply was not so urgent. Towns were small, and not much bigger than many villages of to-day. Cleaning of streets was the business of householders, who were expected to do their part in front of their houses. Fresh water was obtained from wells and pumps, as in many villages to-day. Not until the coming of industrialism in the late eighteenth and nineteenth centuries did the problems of sanitation and water supply become vital Sometimes, however, special circumstances called for early action. In Scotland towns obtained water supply from wells and streams. Only in the larger towns, such as Edinburgh and Aberdeen, was it necessary to take special steps. In Edinburgh, the chief source of supply was the South Loch which acted as a reservoir for the wells

in the Cowgate. On one occasion in 1568, all the inhabitants of the burgh without exception were required

"with all deligence possebil, with schole and mattok and spaid, to pas with the baillies to the said South Loch to repair the dyke for inhalding of the watter" (*Edinburgh Records*, iii, 257).

The standard of purity of the water is indicated by decrees against pollution of wells by cloth-workers and washer-women, and even by fleshers and butchers who frequently washed entrails at the common wells. Keeping the street clean was also a serious problem. A public scavenger was appointed in October 1494 to clean all the streets and lanes in Aberdeen For this he was to receive one penny from every householder. Scavengers were also appointed in Edinburgh, as for instance in 1505, when the person appointed was obliged to have a horse and closed cart and two servants "for purgeing and clengeing of the hie streitt . . . of all maner of mwk, filth of fische and flesche, and fulzie (foul rubbish) weit and dry, staynis and ytheris" (*E.R*, i, 105). As late as the eighteenth century, however, it was customary for householders in the High Street to throw up their windows at ten o'clock, and, with a cry of "Gardy loo" (*Gardez l'eau*) empty the contents of pails and pots on to the street below. Passers-by whose cry "Haud yer hand" came too late, were deluged with filth and slops

The connexion between insanitary conditions and the spread of disease was early appreciated, as the following extract from records of the Edinburgh Town Council (1518) shows:

"It is statute and ordanit be the president baillies and counsale, for the honesty of thair burgh and for the eschewing of daynger of seiknes, that all maner of persouns inhabitaris of this burgh purge and clenge thair calsayes to myd channell fornent thair dwelling places housis or buithis, als weill on the Kowgaitt venellis as on the hie gaitt, of all maner reddis myddings or yther filth."

ADVANCES OF MEDICAL KNOWLEDGE

Progress of medical science, which was part of the wider scientific movement of the fifteenth and sixteenth centuries, is a striking instance of the way in which scientific discoverers are influenced by their social environment. The desire to prolong life and to prevent illness had been present in all ages. So some new circumstances must have emerged to stimulate medical studies and advance knowledge of the human body in health and disease. Doubtless, the development of capitalism was one of these. It infected medical as well as other scientific studies with its breach with tradition* and custom and its conscious search for more effective methods of production But many other influences were at work, direct and indirect. One of them was the renaissance of Italian art. This led to closer study of the human form by Michelangelo, Raphael and Dürer, and their pupils. In their breakaway from conventional styles, they found that their art called for knowledge of anatomy. Some of

* See G N Clark, "Early Capitalism and Invention," *Economic History Review*, April, 1930, *Science and Social Welfare in the Age of Newton*, by G. N. Clark, 1937

them began to dissect. Indeed, Leonardo da Vinci (1452–1518), one of the greatest geniuses of all time, is as distinguished for his work on anatomy as for his better known works of art. He was able to disprove current views about the human body by direct observation and experiment, thus leading in the revolt against teachings based, like most of the medical lore of the time, on the work of Galen, a Greek physician of the second century A D. It is significant that the new science of anatomy reached a high degree of perfection at the Italian Universities, and especially at Padua. Dissatisfied with the medical teaching at Louvain and Paris, Vesalius (1514–64), a native of Brussels, went to Padua, where he became a professor at the age of twenty-four. His *De Fabrica Humani Corporis*, published in 1543, the same year as Copernicus's epoch-making treatise on the heavenly bodies, and illustrated by one of Titian's disciples, is a landmark, for it shows in the most striking fashion the progress that had been made in anatomical knowledge and in printing and pictorial representation. The new illustrative technique wound up a long tradition of futile controversy about the interpretation of texts, because pictorial errors are not easy to explain away.

So far neither England nor Scotland had taken an active part in the new scientific movement. It is true that Henry VIII had founded the College of Physicians in 1518 and Chairs of Medicine at Oxford and Cambridge in 1547. In Scotland a Chair of Medicine was established at Aberdeen in 1505. But it is significant that the best students of medicine went abroad to study at Padua, Montpellier, Basel, Heidelberg and Leyden Surgery remained in the hands of the craft of barber-surgeons, who received incorporation like other crafts, at Edinburgh in 1506 and in London in 1540. The following extract from the Edinburgh charters shows the curious combination of medical lore and modern knowledge, based on experiment:

"Euerie man that is to be maid freman and maister amangis ws be examit and previt in thir poyntis following, thatt is to say, that he knaw anotamell, nature and complexion of every member humanis bodie, and inlykewayes he knaw all the vaynis of the samyn, thatt he may mak flewbothomell (blood-letting) in dew tyme, and als thatt he knae in quhilk members the signe hes domination for the tyme, for every man aucht to knaw the nature and substance of eury thing thatt he workis, or ellis he is negligent. and that we may have anis in the yeir ane condampuit man efter he be deid to mak anatomell of, quhairthraw we may haif experience, ilk ane, to instrict vtheris, and we sall do suffrage for the soule, and that na barbour, maister nor seraund, within this burgh hantt use nor exerce the craft of Surregenrie without he be expert and knaw perfytelie the thingis abouewritten" (*Charter of Barbers*, 1505).

The greatest figure in English medicine in the seventeenth century was William Harvey (1578–1657). He received his medical training at Padua, where Galileo was expounding the principle of the common pump. In 1628 he published his remarkable work on the circulation of the blood (*De Motu Cordis*) Fabricius, his teacher at Padua, had shown the real nature of the valves of the veins, which allow blood to flow heartwards in one direction only By careful experiment, Harvey demonstrated that the heart *itself* is a pump, forcing the blood through the arteries and back through the veins in a continuous circuit Largely through his influence, several attempts were made

to found a College of Physicians in Edinburgh, and at last in 1681 a Charter was obtained.*

In other branches of medicine progress was slow. The old Hippocratic theory of "humours," according to which morbid conditions were associated with excess of any of four humours (i.e. fluids), blood, phlegm, yellow bile, melancholy (black bile), was still universally current; and its overthrow awaited new knowledge of chemical combination outside the body. Meanwhile, the influence of more exact scholarship and printing of reliable texts with pictorial matter, which rendered much disputation superfluous, was not alone among circumstances favourable to a new point of view. Interest in gardening and the importation of new plants from the colonies enlarged the scope of pharmacy, while practical measures to deal with plague and leprosy stimulated enquiry into the nature of infectious diseases. The idea that infection was due to the passage of minute bodies from the infector to the infected was first stated by Fracastoro (1483–1553).

During the sixteenth century the occupational diseases of miners and the prevalence of venereal diseases had already attracted the attention of medical men. The scientific approach to disease by systematic observation was widely extended in the seventeenth century. Thomas Sydenham (1624–89), who has been called "the founder of modern clinical medicine," was prominent among the first to make actual cases of disease the subject of scientific description. Others studied what we now call deficiency diseases. Glisson published a book on rickets in 1650 (Fig 20). The problem of scurvy, brought into prominence by the long voyages of the time, was the subject of a dissertation by John Woodall, Surgeon to St. Bartholomew's Hospital and Surgeon-General to the East India Company. Pressing social need combined with a new impetus to observation and experiment by the invention of such instruments as the microscope Malpighi (1628–94) used the microscope about the middle of the seventeenth century to study the passage of blood from the arteries to the veins through the capillary blood vessels. With its help the Dutch draper, Anthony van Leeuwenhoek (1632–1723) was able to see and first to figure bacteria in 1683. The thermometer invented by Galileo and improved on by Sanctorius (1561–1636) and Jean Rey (1632), French physician and chemist, imposed a new exactitude on the study of fevers; and the famous balance of Sanctorius made possible the first experiments on metabolism.†

PIONEERS OF PUBLIC HEALTH

We have seen that the beginnings of health services were associated with fear of plague. Until little more than a generation ago this supplied the motive for nearly all organized health effort. The end in view was to prevent contact between the clean and the unclean. To-day we still try to segregate those suffering from infectious troubles; but in earlier times policy was "directed rather to the preservation of the untouched than to the recovery of the sick." The sick were shut up in their homes, or hounded out of human society. Plague and pest were regarded as a visitation of the wrath of God, for which

* See *The Early Days of the Royal College of Physicians, Edin.*, by R P. Ritchie, 1899
† See Charles Singer, *A Short History of Medicine*, 1928

the only remedy was prayer and fasting. "The only ordinary means appointed by God, in his holy word, whereby the said apparent scourge may be removed, is ane public fast and humiliation," said the Edinburgh Kirk Session in 1574. For long after, this belief was not wholly abandoned, even in England. For example, the Cholera Act of 1832 recited that "Whereas it has pleased Almighty God to visit the United Kingdom with the plague called the Cholera. . . ."

The scope of divine displeasure contracted as the connexion between disease and insanitary conditions came to be better known. As early as the sixteenth century some had associated insanitary conditions with spread of plague, but it was not until the industrial revolution that such views came to be widely accepted. The factory system and urbanization made infectious disease a positive danger to all. Civic authorities were compelled to pay increasing attention to public health.

A few names stand out in the early history of "preventive medicine." Dr. Richard Mead was one of the greatest. In 1720 he published his *Short Discourse Concerning Pestilential Contagion.* His book, which came at the moment when Levantine Plague, already at Marseilles, was likely to enter Britain, had a tremendous sale. He urged the tightening up of quarantine regulations, and condemned the existing rule that every infected house should be closed and cut off from the rest of the community. The "shutting up of houses," he says, "is only keeping so many seminaries of contagion, sooner or later to be dispersed abroad." Such a policy, he argued, encouraged attempts to conceal the presence of infection. An infected house should be treated like a house on fire, dealt with at once, as much in the interests of the inmates as of the community. The sick and the sound should be removed to different places, three or four miles out of town, and every precaution should be taken to check the spread of infection. Mead was sufficiently far-sighted to realize the necessity for a central authority. So he proposed the establishment of a Council of Health entrusted with wide powers. The organization of town life had not proceeded far enough to make such a plan acceptable.

Before urbanization had reached the dimensions of Victorian days, risks of infection, when large numbers of people are thrown together, were easy to recognize in the Army and in the Navy, as well as in prisons and hospitals. Sir John Pringle (1707–82), an experienced army physician, was one of the greatest medical reformers of the time. In 1752 he published his *Observations on Diseases of the Army,* a work which quickly gained him an international reputation. In it he laid down rules for camp hygiene, for clothing and for diet of troops. He showed that camp dysentery spread through insufficient sanitary arrangements, and that fever (malaria) resulted from camping near marshy land. He was the first to establish the identity of a number of diseases, then variously called hospital fever, gaol fever, and ship fever, now known as typhus. Pringle was also first to realize the part played by putrefaction in the production of disease

No less important than Pringle was another Scot, James Lind (1716–94), who did for the Navy what Pringle did for the Army. His *Treatise on Scurvy* (1753) discussed the cause of this disease and laid down the proper treatment for it. Largely as a result of his work, the Admiralty decreed in 1795 that all

ships in the Royal Navy should carry a supply of lemon juice. Sir Gilbert Blane (1749–1834), a native of Ayrshire, was also for a time a naval surgeon. While on service with the Fleet in the West Indies he was shocked at the amount of preventable disease among seamen. With the co-operation of naval officers, he enforced strict rules regarding cleanliness. In 1783 he was appointed physician to St. Thomas's Hospital. There he carried on his campaign on behalf of preventive medicine.

For long, jails had been regarded as veritable breeding-places of plague. So widespread was disease in them that "gaol fever" was regarded as inevitable "Gaol fever," however, like "camp fever" or "hospital fever," was none other than typhus, of which the carrier is the human body louse. Investigations into "gaol fever" were promoted by two circumstances; one, the risk of infection to outsiders, and, second, a new respect for human life. This is one of the brighter features of the social milieu during the Industrial Revolution. Prominent among those who helped to promote it was John Howard (1726–90). By personal investigation at home and abroad, Howard laid bare the appalling condition of English jails, it was largely through his revelations that conditions were improved.

Howard's investigations are a striking testimony to the medical value of inquiry into social conditions, because they shed new light on the nature of typhus. They also illustrate the effectiveness of the medical approach to social grievances Ordinary people are galvanized into action when the facts about social disease are forced on their notice. Public opinion thus aroused is then powerful to compel reform. Howard's work, continued by the great Quaker philanthropist Elizabeth Fry, is a case in point; but there are many others. The work of the small band of people who aroused the British people to the horrors of slavery; the Mines Commission which revealed the widespread employment of young children in the mines; Charles Booth's famous inquiry into poverty in London in the 1880's, had a comparable effect.

The most successful early experiments in preventive medicine were connected with smallpox. This disease came into prominence at the end of Elizabeth's reign. It was the great scourge of the eighteenth century. Writing in 1819, Sir Gilbert Blane says:

"though the term plague carries a sound of greater horror and dismay, we should probably be greatly within the truth in asserting, that smallpox has destroyed a hundred for every one that has perished by the plague."

It was early recognized that attacks varied in intensity, and that infection with a mild form gave protection from a more severe one. This led to the practice of inoculation, which was introduced by Lady Mary Wortley Montagu into England from Constantinople about 1720. It achieved at once a brief popularity among the upper classes. Twenty years later it was revived. Owing to improved technique, inoculation thenceforward became common, especially among the upper and middle classes. Many hospitals and dispensaries performed free inoculation in times of smallpox epidemics. Such was the preventive method in practice when an obscure English medical practitioner—Edward Jenner (1749–1823)—was attracted to the problem. In

1796 a dairymaid suffering from cowpox, a comparatively mild disease allied to smallpox, came to him. Believing that deliberate infection from a mild form would give immunity from a more serious, Jenner inserted matter from a pustule on her hand into the arm of a boy of eight. The boy developed the mild disease of cowpox. Next Jenner inoculated the boy with smallpox, which failed to develop By this reckless experiment he demonstrated the principle of vaccination. Though at first there was much opposition, the success of vaccination justified itself.*

HOSPITALS AND DISPENSARIES

The eighteenth century is noteworthy for the establishment of hospitals and dispensaries, as well as for the work of these pioneers of public health. Hospitals of medieval times, many of which had been swept away at the time of the Reformation, were houses of refuge for the destitute as well as places of succour for the sick. In the seventeenth century the view gained ground that hospitals should be both places for the cure of the sick, and centres for the study of medicine. This was alike in keeping with the spirit of "the new humanity" and the methods of experiment and observation characteristic of the scientific movement. Holland led the way. Clinical teaching was established at Leyden University about 1626, and under the leadership of Hermann Boerhaave (1668–1738), it became a famous medical school. Scotland's debt to it was considerable, for it was Leyden's system of clinical teaching that inspired the founders of the famous Edinburgh medical school.

The movement for the establishment of a medical faculty at Edinburgh University was initiated by the Royal College of Physicians which had been chartered in 1681. The chief advocate was Archibald Pitcairne, graduate of Edinburgh and Rheims, who at the height of his fame in 1692 was appointed to the Chair of Medicine at Leyden. Three of his pupils have left permanent marks on the history of medicine: John Munro, leading physician of Edinburgh and staunch advocate of the plan for a medical seminary; Richard Mead, a pioneer of public health in Britain; the great Hermann Boerhaave himself. Munro's son studied under Boerhaave at Leyden, and on his return to Edinburgh in 1720 was appointed Professor of Anatomy Several of his contemporaries, Rutherford, St. Clair, Plummer and Innes, were appointed to Chairs in Edinburgh University in 1726. Thus the Edinburgh Medical School started its career. An important step was taken in 1748 when Rutherford commenced to give a course of clinical lectures in the newly-founded Royal Infirmary. Under the influence of these men, a system of close co-operation between medical school and hospital was first firmly established. Edinburgh became a pattern for other centres of medical teaching in and beyond Scotland.†

South of the Border, John Bellers, a Quaker, published in 1714 *An Essay Towards the Improvement of Physick*, in which he urged the founding of

* See M C Buer, *Health, Wealth and Population*, 1926, Ch xiv.

† See *History of Scottish Medicine*, by John D. Comrie, London, 1932, i, 261.

hospitals as training-grounds for medical students. The Universities, he said, "being the Great Nurseries of our Graduated Physicians, make Hospitals there to be absolutely necessary for their better Instruction, by adding Practice to their Aphorisms and Theory they will learn more in Seven years than in Fourteen years without them" (quoted Buer, 126). Bellers went further. He advocated State aid to medicine, the endowment of scientific research and the establishment of parish doctors He envisaged a nationally planned medical service. Partly due to the advocacy of such people, and partly to the philanthropic movement of the time, many hospitals were founded during the eighteenth century. Between 1720 and 1745, Westminster, Guy's, St. George's, London and Middlesex were established in London, while in the provinces Bristol led the way in 1735. North of the Border, Edinburgh, Glasgow, and Aberdeen had their Royal Infirmaries before 1750. Thereafter hospital building went on at an accelerated pace.

As the Industrial Revolution swept over the country, many general hospitals were founded, and in addition special hospitals, such as the lying-in hospitals of Glasgow and Edinburgh, the London Fever Hospital, the Royal Chest Hospital, and the Royal Ear Hospital, etc. At first these hospitals were free to all who needed their services. Later, restrictions of a most vexatious kind were introduced. These made it practically impossible for poor applicants to gain admission. Fees were charged for admission, matrons, nurses and porters all collected their sixpence or shilling for every service rendered This system became a crying scandal, and was not abolished until 1829, when the Royal Free Hospital was founded in London. Thereafter other hospitals had to follow suit. They became free, as had been the intention of their philanthropic founders. The restrictions on admission to hospitals had the obvious effect of excluding the poor. This was a very serious matter, because the general practice of medicine was chiefly among the well-to-do. Unless some remedy were devised, the poor would be excluded from any medical attention. The situation was retrieved by the establishment of lying-in charities and the dispensaries. Before the founding of lying-in hospitals, poor women were at the mercy of ignorant midwives, "who often combined 'the nursing of lying-in' women with the hawking of fish and vegetables or with other less reputable callings."

A new era, however, commenced in 1739, when Sir Richard Manningham established a ward for lying-in women in St. James's Parochial Infirmary. He was followed a few years later by William Smellie, who taught midwifery in London, and established a scheme for attending poor women gratuitously in their own homes. Through the combined influence of these and others, such as John Hunter, many hospitals provided lying-in wards, and a number of new maternity hospitals were opened in the second half of the century. The combined effect of new knowledge and new organization is seen in the record of the British Lying-in Hospital. Between 1749 and 1758 the deaths among women averaged 1 in 42 and among children 1 in 15. By 1799–1800 the deaths among women had been reduced to 1 in 913, and among children to 1 in 115.*

* See Dorothy George, "Some Causes of the Increase of Population in the Eighteenth Century," *Econ. Journal*, September 1922.

Medical services were also extended to the poor through dispensaries, where advice and medicine were provided. For those unable to attend the dispensary arrangements were made for visitation at home. These dispensaries were in fact the forerunners of the modern clinics. The first was opened in Red Lion Square, London, in 1769, "for the relief of the Infant Poor." It was followed in 1770 by the well-known General Dispensary. Before the close of the century many more had been founded, and doctors with experience of such institutions were enthusiastic about their influence for good.

"In the space of a very few years," wrote Dr. Lettsom, the founder of the General Dispensary, "I have observed a total revolution in the conduct of the common people respecting their diseased friends. They have learned that most diseases are mitigated by a free admission of air, by cleanliness and by promoting instead of restraining the indulgence and care of the sick. Such instruction was new to the poor, though important to their preservation, and when we consider how late they have acquired this information, we must lament that so many centuries have elapsed before an institution like the General Dispensary became the object of public attention" (quoted George, 343).

The dispensary movement was specially valuable because it gave medical advice to the poor and rescued them, to some extent, from the ministrations of quacks and those "infernal monsters," the ignorant and untrained nurses. The pioneering work of the doctor had a double value It helped the poor and it taught the doctor how the poor lived. Stanger, for instance, one of the doctors of the Institution for the Cure and Prevention of Contagious Fever, urged the widening of lanes and alleys, the opening and enlarging of courts and yards, and the enforcement of regulations against overcrowding in factories, hospitals, workhouses, and prisons. His views, says Mrs. George, show "a remarkable anticipation of future policy." Outside London the movement was slower, because the growth of urban life was slower. With the rapid expansion of industrial towns in the nineteenth century the problem of public health became urgent, but it was not until "the cholera scare" of 1830–2 that public opinion was aroused.

POPULATION CHANGES

Advance of medical science, growth of hospital services, increased supplies of food resulting from the revolution in agriculture, all contributed to a rapid increase in population. Owing to inadequate statistical material there was much doubt about whether population was really growing or not. These doubts were quickly dispelled after the publication of the *Essay on Population* by Malthus in 1798, and the compilation of the first Census of 1801. Before many years had passed everyone was convinced that population was increasing, and increasing rapidly. The population of Great Britain, estimated as 7,250,000 in 1751, had risen to 10,943,000 in 1801, and to 14,392,000 in 1821.

In Britain there was no serious lack of food supplies, as in contemporary Ireland, where a rise of numbers expanded to the limits set by a potato standard. The "flood of life" which caused Malthus so much misgiving,

was due to saving of life rather than to increased birth-rate. Improvements in obstetrics, the spreading of hospitals and dispensaries, the conquest of smallpox, the rapid eclipse of scurvy following on the agrarian revolution, improved sanitation of the towns, all played their part in a steep fall of the death-rate. The death-rate fell in two great waves: the first from 1730 to 1760, and the second from 1780 to 1810, and, while this fall was applicable to all age-groups, it was greatest for children. Between 1740 and 1840, the birth-rate showed a slight rise in the first half of the period and a slight fall in the second.*

On the whole, emigration and immigration had balanced each other. Some districts, like the Highlands, could show depopulation. Others, like Glasgow, could show large numbers of immigrants from Ireland According to Mrs. George, there had been an Irish problem in eighteenth-century London. Between 1800 and 1850 the Irish, who had "no margin between subsistence and starvation," poured into English and Scottish ports. By 1851 the Irish population in England had risen to 3 per cent, and in Scotland to 7 per cent. This Irish element was, of course, distributed unevenly. In 1834–5 one-fifth of the population of Manchester was said to be Irish. In Glasgow the number of Irish rose from 25,000 in 1821 to 35,554 in 1831, which represented about one-sixth of the population in the latter year (Clapham, i, 61) Within the country there was considerable movement of population which, according to Redford (*Labour Migration in England*, 1926), proceeded with wave-like motion, gradually converging on the industrial towns.

"The towns, in the mass," says Clapham, "were mainly inhabited by immigrants, as London always had been. Out of 3,336,000 people of 20 years of age and upwards living in London and 61 other English and Welsh towns in 1851, only 1,337,000 had been born in the town of their residence. . . . Of 1,395,000 Londoners over 20 years of age in 1851 not much less than one-half (645,000) were London-born. . . . In Leeds, 55,000 out of 95,000 of the adults, and in Norwich and Sheffield almost exactly one-half, were native; but in Manchester-Salford, in Bradford and in Glasgow the proportion of natives was only just over a quarter, and in Liverpool considerably less than a quarter" (i, 536–7).

URBANIZATION AND SOCIAL CONDITIONS

Industrialization, which had proceeded slowly before 1800, became an avalanche in the first half of the nineteenth century. The Hammonds (*Town Labourer*) have sufficiently described how rapidly houses were thrown up and how the population of the towns became denser and denser. They say the industrial towns "were not the refuge of a civilization but the barracks of an industry."

This rapid and uncontrolled growth of towns multiplied a thousandfold all the dangers to health resulting from overcrowding, against which govern-

* See G Talbot Griffith, *Population Problems of the Age of Malthus*, 1926, 43; for a general criticism of recent research and a general restatement of the position, see "The Population Problem during the Industrial Revolution," T. H. Marshall, *Economic History*, January 1929.

ments and local authorities had struggled for many centuries. Insanitary conditions, plague-infected alleys and wynds, back-to-back houses, smoke-polluted air, absence of sunlight and fresh air—these were the rule and not the exception in the industrial towns.

"Such is the absence of civic economy in some of our towns," wrote Chadwick in his famous *Report on the Sanitary Condition of the Labouring Population* (1842), "that their condition in respect to cleanliness is almost as bad as that of an encamped horde or an undisciplined soldiery."

The cholera epidemic of 1830–2 shook the nation. One place after another reported the dread epidemic, and everywhere the poorest and most insanitary districts were noticeably those most affected. The death-rate soared. In Glasgow it rose by 20 per cent in 1832, where 3,005 of 6,208 cases died. In the mining villages, as in the poor quarters of most towns, more than 50 per cent of those infected died.* If one adds to the toll of this scourge the ravages of typhus, most devastating of all epidemics, a growing incidence of measles, overcrowding and a high death-rate in the hospitals, the townspeople of Britain had just cause for alarm. The danger, says Clapham, was

"that the improvement in the health of the country and of its towns which, hard as it is to believe, had undoubtedly taken place between the middle of the eighteenth century and the decade 1820–30, might be lost now that an uncontrolled, or improperly controlled, town had become the home not of a minority, but of the representative citizen" (1, 538) (Fig. 21).

Before this time a little had been done to clean up the towns. But action taken was largely ineffective, because of defective local government, lack of technical knowledge about sanitation, and opposition of vested interests. The care of street-paving, of drainage, and of lighting were in the hands of a multiplicity of authorities, variously known as Commissioners for Paving, Lighting, Sewerage, Police, and so on. The task of coping with the sanitary problems of the rapidly expanding towns was quite beyond them. It was left to the new municipal corporations established by the Act of 1833 (Scotland) and 1835 (England) to make a frontal attack on these problems. The magnitude of the task facing them is shown in Chadwick's *Report*, and in Friedrich Engels' *The Condition of the Working Class in England in 1844*. Describing the old town of Manchester, Engels writes:

"Passing along a rough bank, among stakes and washing lines, one penetrates into this chaos of small one-storied, one-roomed huts, in most of which there is no artificial floor, kitchen, living and sleeping-room all in one. . . . Everywhere before the doors residue and offal; that any sort of pavement lay underneath could not be seen but only felt, here and there, with the feet. This whole collection of cattle-sheds for human beings was surrounded on two sides by houses and a factory, and on the third by the river, and besides the narrow stair up the bank, a narrow doorway alone led out into another almost equally ill-built, ill-kept labyrinth of dwellings." Such was a part of the old town of Manchester, and its condition in 1844 was the result of industrialism. Engels goes on: "Everything which here arouses horror and indignation is of recent origin, belongs to the

* Macdonald, *Scotland's Shifting Population*, 1937, 92.

industrial epoch. The couple of hundred houses, which belong to Old Manchester have been long since abandoned by their original inhabitants; the industrial epoch alone has crammed into them the swarms of workers whom they now shelter, the industrial epoch alone has built up every spot between these old houses to win a covering for the masses whom it has conjured hither from the agricultural districts and from Ireland, the industrial epoch alone enables the owners of these cattle-sheds to rent them for high prices to human beings, to plunder the poverty of the workers, to undermine the health of thousands, in order that they *alone*, the owners, may grow rich" (51, 53–4).

The "new town" was no better.

"Here all the features of a city are lost," says Engels "Single rows of houses or groups of streets stand, here and there, like little villages on the naked, not even grass-grown, clay soil, the houses, or rather cottages, are in bad order, never repaired, filthy, with damp, unclean, cellar dwellings; the lanes are neither paved nor supplied with sewers, but harbour numerous colonies of swine penned in small sties or yards, or wandering unrestrained through the neighbourhood. The mud in the streets is so deep that there is never a chance, except in the driest weather, of walking without sinking into it ankle deep at every step" (54).

Similar conditions obtained in other industrial towns (Fig. 22). In Bradford, it was reported in 1844,

"Several nuisances exist One of these is in the most public part of the town and in the very centre of business, and consists of refuse, offal, etc from the butchers' shops, necessaries, ash-places and urinaries . . . This is private property and therefore the surveyors understand that they cannot cause the removal of these nuisances" (quoted Clapham, i, 539).

The sites of the new University in London, of the new row of grand houses in Hyde Park Gardens and of Belgrave Square, were dumping-places for the refuse of scavengers' carts. Greenock was hard to beat. In Market Street, says a medical investigator in 1842,

"there is a dunghill, yet it is too large to be called a dunghill. I do not mistake its size when I say it contains a hundred cubic yards of impure filth, collected from all parts of the town. It is never removed; it is the stock-in-trade of a person who deals in dung; he retails it by cartfuls To please his customers, he always keeps a nucleus, as the older the filth is the higher is the price" (Chadwick, 47).

The horrors of the rapidly-growing industrial town were largely the result of unrestricted private enterprise. Houses could be run up back-to-back, land could be overcrowded. There was no consideration for the health of the people if slums paid the proprietors. By the same token, removal of filth could look after itself; but a supply of water and disposal of sewerage, on the other hand, presupposes knowledge and application of sanitary science, as yet in its infancy. When towns were small, rivers and streams provided water and carried away refuse. With expansion of population, pollution of rivers vitiated adequate supply of fresh water. The solution of the problem was the separation of sewerage from the water supply, by

devising methods of sewage disposal and the drawing of fresh water from a distance. Liverpool went to Lake Vyrnwy in Wales, Manchester to Thirlmere, and Glasgow to Loch Katrine. These advances happened in the second half of the nineteenth century. Though water was being laid on to the better-class houses before 1840, the average run of people were still dependent on wells in constant danger of contamination from nearby cesspools.

PUBLIC HEALTH LEGISLATION

The connexion between insanitary conditions and contagious disease had long been known. Only when towns became the home of the mass of the people was the nation aroused to action, but State action was not speedy, nor was the Public Health Act of 1848 passed without considerable opposition. The Editor of the *Economist* regretted that "it had got so far as a Committee without meeting the opposition it deserved"

In arousing the nation and in securing this Act, which is the basis of all later sanitary law, Edwin Chadwick played the leading role. Under the ægis of the Poor Law Commission, of which he was Secretary, investigations were carried out into preventable causes of fevers in London. The reports are striking. They revealed for the first time the appalling conditions under which the mass of the people lived. They also furnish an early instance of the use of expert advice on social matters as a basis for government action. The publication of the Reports attracted tremendous public interest. A movement for public health reform was set on foot. On the initiative of Charles Blomfield, Bishop of London, there was a new inquiry, covering the whole country. The outcome was the Report of 1842 on the *Sanitary Condition of the Labouring Population.*

Meantime the Select Committee of the House of Commons, appointed to inquire into the health of towns, was calling attention to the need for general regulations governing housing and sanitation. The Government, realizing the serious nature of the problem and the far-reaching results of any legislation they might propose, decided to call for a further and more elaborate investigation So in 1843 a Royal Commission was appointed to go into the whole subject. Its Report confirmed Chadwick's conclusions and urged the establishment of standing Boards of Health in all populous towns

The stage was now set. The experts had made their Report based on investigation of conditions in the large towns. They had submitted their recommendations In 1848 the Public Health Act was passed It set up the first Central Board of Health consisting of Lord Shaftesbury, pioneer of factory reform, Lord Carlisle, Dr. Southwood Smith, and Chadwick himself. London was not included in the new arrangements. Its problems were to be dealt with separately, but a beginning was made by the appointment of the Metropolitan Commissioners of Sewers, who were given wide powers over the drainage of the whole area. Hardly had the new Board of Health been set up, when cholera again visited this island The rising death-rate alarmed the public. "The dignified pages of the *Quarterly Review*," says R. H. Mottram (*Early Victorian England*, 1934, i, 201), "bear witness to the state of mind of perhaps the least vulnerable and most influential section of

the nation." The issue of September 1850 gave much space to all the recent Reports on Water Supply, Health of the Towns, Sanitation, and especially to Simon's *Report on the Sanitary Condition of the City of London.*

"It trounced the water authorities for irresponsible monopoly," says Mottram, "for distribution of the primal necessity of life in a state of noisome impurity, at an exorbitant price, and for squandering in a greedy struggle for lucrative territory sums that should have been laid out in piping poorer districts of the town, and for combining in close confederacy against the public."

The Board of Health had a short career. It was allowed to lapse in 1854, and with it Chadwick's official career came to an end. It foundered partly because of local opposition, which restricted its application to no more than about two million people, and partly through what Fay calls "parliamentary devotion to *laissez-mourir.*" Four years later its medical work was placed under a Committee of the Privy Council, which lacked the drive of a Chadwick, though responsible for the first National Food Inquiry (*see* p. 77). In 1871 the medical department of the Privy Council became part of the Local Government Board, and this in turn handed over its medical functions to the Ministry of Health in 1917. The return of cholera in 1854 and 1865–6 once more provoked widespread concern, which led to the passing of the Sanitary Act of 1866 This Act made the appointment of sanitary inspectors obligatory on all local authorities, declared overcrowding "a nuisance," and, for the first time, authorized a Secretary of State to compel authorities to remove nuisances and make proper provision for water and sewerage.

But the responsible authorities were numerous. Though their functions overlapped at many points, they did not collectively cover the whole field. Moreover, sanitary legislation was in much need of modification. Some authorities were alive to the problems. Liverpool had the distinction of appointing the first British Medical Officer of Health in 1847 Manchester, where Dr. Percival had been a pioneer of reform in the late eighteenth century, did not appoint one till 1868. Two years later Glasgow established its Sanitary Department under the charge of a medical officer. Everywhere vested interests stood in the way In his *Report* of 1867 to the Privy Council, Sir John Simon pointed out "how utterly unprotected the public still was against the vast injuries which purveyors of water supply could inflict, and how urgently it was needed that the purveyors who wielded this colossal power of life and death should be severely punishable at law for any wilful or neglectful distribution of polluted water." As late as 1890, Simon could write in his *English Sanitary Institutions*.

"That even the London water supply, after half a century of disgusting disclosures, and after various very terrible disasters, is not yet secured against gross defilement, is a fact to be sufficiently gathered from the reports of the official examiner under the Metropolis Water Act, 1871, and is in other ways deplorably notorious "

The Royal Sanitary Commission of 1869–71 recommended that "all powers requisite for the health of towns and country should in every place be possessed by one responsible local authority." On the basis of the Report

an Act was passed in 1871, and supplemented in 1875. It created a permanent central authority—the Local Government Board—to direct the unco-ordinated work of local authorities, but the ideal of a unified health service was still far off. Apathy and lack of vision of the Local Government Board was to blame for much inefficient and unco-ordinated work by the scores of authorities interested in public health. Jealousy of local authorities was at the root of the restricted powers with which they were endowed. Special legislation for any extension of health work was necessary: witness the astonishing "Act to permit Local Authorities to provide Cleansing and Disinfection for Persons infected with Vermin," passed in 1897. Though many of the smaller sanitary authorities were "unworthy of their powers," some of the great cities, such as Liverpool, were armed with powers sanctioned by local Acts and were advancing all along the line. Some had already displaced private companies for the supply of water. Others were doing so at the close of the century; but Londoners continued to use water purveyed by private companies until 1903–5, when the water companies were consolidated into a sort of public utility company known as the Metropolitan Water Board.

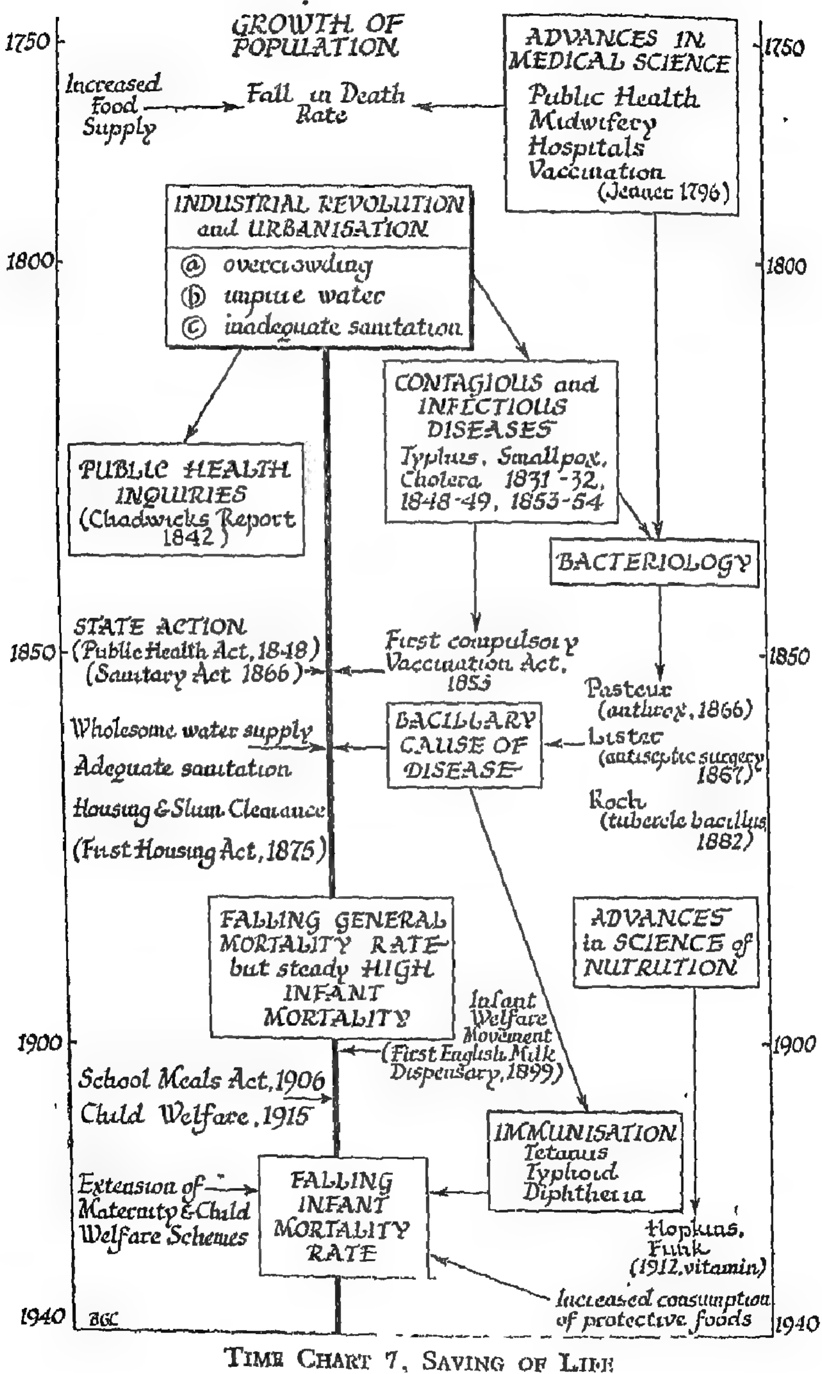
HOUSING

While progress was being made in general sanitation, water supply, drainage, and so on, the actual houses were completely neglected by public authorities. Right down to 1865 the people's housing needs were at the mercy of the speculative builder, who could build whatever type of house gave him the biggest profit Slums were thus created at a scandalous pace. Back-to-back houses, often with windows not made to open, wretched sanitary arrangements, consisting of a privy midden and water-tap serving several of them, narrow courts and streets, each acre crammed with as many houses as the builder could pack into it—such were the castle-homes of the mass of Englishmen.

About 1868, "reforming energy turned from the problem of sanitation, now well on its way to be solved, to the improvement of the quality of the house itself," says Sir Ernest Simon.* The reforming energy of the Government was doubtless stimulated by the Reform Act of 1867, which extended the franchise both in national and municipal elections to the urban working-class. Manchester at once procured a local Act, the first to lay down that houses "unfit for human habitation" could be closed without compensation to the owners. The principle was generally applied in Cross's first Housing Act of 1875. This inaugurated slum clearance schemes by authorizing local authorities to condemn, demolish and reconstruct whole areas. Under the guidance of Joseph Chamberlain, Birmingham embarked in the same year on one of the earliest and most extensive projects of the kind.

These and other Acts were inadequate In the eighties, popular feeling was running high The Great Depression had settled on Britain. Unemployment and poverty challenged the creed of individualism. *Laissez-faire* was assailed by doubts. Free trade, competition and self-help had not fulfilled

* *A Century of Municipal Progress*, 1935, 203.



Time Chart 7, Saving of Life

the promise of those who had urged the common people to be patient. In *The Bitter Cry of Outcast London* (1883), G. R. Sims voiced the sentiments of countless people; and the Government could not stand still. In 1884 the famous *Royal Commission on Housing* was appointed. This was followed by the Housing of the Working Classes Act of 1890, which consolidated and extended previous legislation and gave local authorities power to buy land and raise loans for housing the working classes. Its provisions were merely permissive. Moreover, municipalities, having cleared a slum area, proceeded to sell the same site to new jerry-builders and real-estate speculators. The prevailing prejudice against public enterprise died slowly. Only 5 per cent of the new working-class houses built between 1890 and 1914 were provided by public authorities.

Before the war of 1914–18, only the very worst slums were tackled. Since little provision was made for the families displaced, a clearance intensified overcrowding and slum conditions in other districts. The rents of the new houses were too high for most of the people displaced, and many authorities contented themselves with "reconditioning" old houses, because it was cheaper than building new ones. The 1911 Census showed that one-tenth of the entire population was living in overcrowded conditions, that is, more than two to a room, children counting as half. This statutory definition was deplorable. A family of four adults and eight children could live in a four-roomed house and yet not be overcrowded. Besides, general averages often conceal the real nature of the problem. In some towns overcrowding was desperate. Over all London the percentage was 16·7, but this included municipal borough's such as Bermondsey with 23·4, Bethnal Green with 32·2, Stepney with 35·0, Shoreditch with 36·6, and Finsbury with 39·8. Birmingham and Liverpool had only 10·1, but overcrowding was at its worst north of the Tees. Newcastle had 31·6 and Sunderland 32·6. Scotland, with its one-roomed *but-and-ben* houses in country and village, and its tenements in towns, had a bad record. In 1911, 47·9 per cent of the people of Scotland lived in one- or two-roomed houses. For England the corresponding figure was only 7·5. On behalf of Scotland it was said that rooms were larger than in England. Taking Scotland as a whole, in 1911 45·1 per cent of the total population lived two in a room, 21·9 per cent three in a room, and 8·6 per cent four in a room.

The profit motive, which is the moving force of the capitalist system, is nowhere seen to less advantage than in the operations of the building industry. The urgent social problem of providing adequate houses for the masses was tackled tardily and reluctantly in the nineteenth century, and then only when it paid to do so. After 1907 there came a definite check, not because the need was less urgent, but because the investment of capital abroad offered a higher return. Much of the capital employed by speculative builders was borrowed, and the higher rates of interest now obtainable reflected larger profits to be made in countries overseas. The housing problem was and is a problem of poverty. Now, as then, a large proportion of people earn insufficient wages to afford a decent house. The war of 1914–18 intensified the problem. In 1918 there was a desperate shortage of houses. One government after another has since tackled the problem, the public outcry being

too loud to ignore. In a world that cries aloud for communal effort and a planned economy to satisfy so urgent a social need, *laissez-faire* still fights a successful and formidable rearguard action. One bright spot has been the new standard of working-class housing recommended by the Tudor Walters Committee of 1918, and accepted by every government since Houses, they said, should be built not more than twelve to an acre, each with its own garden in a well-planned estate. Every house should have a large living-room with a sunny aspect and a bathroom.

The towns of the Industrial Revolution grew up haphazard, without planning of any sort. There were one or two exceptions, of which the outstanding are Edinburgh (Fig 23), Aberdeen, Bath, and parts of London. The districts planned were generally for the middle and well-to-do classes. Before the death of Victoria some towns, such as Birmingham, initiated schemes of slum clearance and improvement, but most local authorities, still cringing to private enterprise and clinging to the creed of non-interference with business, remained apathetic. At last in 1909 the Town Planning Act gave local authorities power to plan new and undeveloped areas. Not until 1932 were powers added to plan built-up areas. Town planning is therefore in its infancy. Considerable progress has been made in planning new suburbs, but the problem of the old built-up areas has hardly been touched. The wider problem of regional and national planning is only beginning to impinge on human consciousness. Advances of urban transport have opened out vast possibilities for good. There are now some who urge that a limit should be set to the growth of towns, and that additional accommodation should be provided by building planned satellite towns. Here Manchester has led the way at Wythenshawe and Aberdeen, always a pioneer in town planning, has planned to lay out Kincorth.*

EXTENSION OF HEALTH SERVICES

During the nineteenth century sanitation, water supply, infectious diseases, were the chief public health problems tackled by local authorities under the direction of the Local Government Board. The twentieth century has seen both vast extension of public health services and profound changes in their scope. There is more and more emphasis on persons rather than things. One facet of the new outlook is the prevailing attitude to infantile mortality During the nineteenth century, when the chances of survival increased steadily at other ages, the death-rate of infants under one year of age remained at about the same level; 150 per thousand It began to fall about 1900 to its present figure, i.e. 55 (England), 76 (Scotland), and the record of steady progress is becoming a challenge to further effort for the conservation of child life.

In this struggle we have benefited from foreign experience. As early as 1892, Dr. Budin of Paris had established his *Gouttes de Lait* for the supply of fresh milk free to poor mothers, and in 1903 Dr. Miele opened his welfare

* On this subject see *A Century of Municipal Progress*, ed Harold J Laski, 1935, Ch I by Sir E D. Simon, also *England*, 1870–1914, by R C K. Ensor, Clapham, *Economic History*, iii.

centre at Ghent. The first English milk dispensary was started at St. Helens in 1899, and in 1907 the first English "School for Mothers" was opened at St. Pancras. At first these services—the supply of milk and education—were largely carried on unofficially, but commencing in 1906 with the Education (Provision of Meals) Act, local authorities were empowered to safeguard the health of the children by systematic medical inspection; by providing meals free or at reduced cost to necessitous children; by establishing special open-air education for defective children (blind, deaf, cripple, mentally defective), by the establishment of school clinics and child guidance centres. This important section of the health services has emphasized positive health and early diagnosis of disease. It is now the most vital branch of social medicine.

What is most characteristic of the present phase of national health legislation is increased attention paid to mothers and young children In 1904 a government committee pointed out that the heavy infant mortality rate had not appreciably diminished within the previous twenty-five years, and that one-half of the mortality occurred in the first three months of life. It was not until 1915 that a public scheme for child welfare was satisfactorily launched. Authorities were given very wide powers to make "such arrangements as they think fit . . . for attending to the health of expectant and nursing mothers and of children under five years of age" Since then one authority after another has adopted schemes embracing home visitation by health visitors, ante-natal, post-natal, and child welfare classes, maternity homes and hospitals, services of midwives, doctors and specialists *

The establishment of a national system of health insurance in 1911 is one of the greatest achievements in the history of public health. It was largely due to the initiative and enterprise of one man, David Lloyd George, and it was passed in the face of the bitter opposition of the Conservatives.

"Unable to destroy it in Parliament," says Ensor (445), "the opposition tried hard to wreck it in the country by furiously fomenting every popular prejudice or professional alarm which so vast a scheme was bound to encounter. Duchesses visited the Albert Hall to exhort the public not to 'lick stamps'; mistresses organized domestic servants in the same crusade, wage-earners of every kind were urged to resist the deductions from their wages as a monstrous oppression by the Government In addition, it was sought to make political capital out of the anxieties of the doctors, whose livelihoods were bound to be greatly affected, one way or the other, and without whose co-operation the Act could not possibly be worked."

The National Insurance Act made sick insurance compulsory for all manual workers between the ages of 16 and 70 (this was later reduced to 65), and for all non-manual workers earning less than £160 a year. (In 1919 the income limit was raised to £250, and in 1942 to £420) Under this vast co-operative health scheme the services of close on 20,000 practitioners are at the call of 19½m people when they are ill. A novel and important provision of the Act was that a portion of the funds might be devoted to medical research. The Medical Research Committee, now the Medical Research

* See *The Early History of the Infant Welfare Movement*, 1933, by G. F. McCleary

*

Council of the Privy Council, receives annual monies voted by Parliament. By appointing Committees to study particular problems—like school epidemics, by making grants to individuals and University Departments, an impressive amount of research has been carried out in recent years, touching almost every problem of health.

These services do not exhaust State activities in the realm of health. The place of work is clearly as important as the home Large numbers of people, working under insanitary conditions in the factory, increase the dangers of infection, and the processes of production raise special problems of occupational disease. Some attention had been paid to this aspect of preventive medicine by Agricola in his famous sixteenth-century manual of mining technology, where the health and accidents of miners occupy a special section; by the founders of the Royal Society, who included the same theme in their *heads of enquiries* along with diseases of divers, though little headway was made with the study of the respiratory occupational diseases before J S. Haldane's work during the first decades of our own century. Lead-poisoning excited the interest of medical men when the chemical industry began in the closing years of the eighteenth century. One of the pioneers was Dr. Percival of Manchester Percival was largely responsible for the creation of an unofficial Board of Health in Manchester in 1796, and it was largely through its efforts that the serious effects of factory conditions on labour were brought before the public.

During the Victorian era, Parliament increasingly extended its control over factory conditions. By 1901, when the consolidating Factory and Workshop Act was passed, almost every aspect of employment and factory condition was controlled by the State. Nowadays State action has gone beyond mere regulation. By establishing the Industrial Health Research Board, it has shown an active interest in the prevention of disease and the preservation of the health of workers. An argument in favour of its activities which appeals to employers is that anything which increases the fitness of employees tends to industrial efficiency.

> "Here we have the State not merely legislating for the removal of evils empirically discovered," says the Committee on Scottish Health Services, 1936, "it is directing and encouraging research into the psychological and physical causes of those industrial maladjustments that result in ill-health and inefficiency."

Notable progress has been made in the provision of hospital services during the present century.* There are two chief classes of hospital to-day, the voluntary and the public. Within each category some are general and some specialist. The voluntary principle has long been in favour in this country, because in keeping with the creed of self-help and individualism which dominated most minds in Victorian days. At the present time there are more than a thousand voluntary hospitals in Britain, ranging from small cottage hospitals with few beds to great hospitals with over a thousand beds, such as the Edinburgh Royal Infirmary or the new Aberdeen Royal

* See *Report on the British Health Services,* by P.E.P. (Political and Economic Planning, 1937).

Infirmary, making available to its patients all the most up-to-date scientific and medical knowledge, and having within its grounds the new home of the Aberdeen University Medical School.

The voluntary hospitals are independent of State control. Generally, their management is vested in trustees or governors who are subscribers of a certain amount. In practice, however, the subscribers, like shareholders of a Company, exercise little control The real government is in the hands of a Board of Management Each hospital raises and expends its own funds. This leads to great overlapping of effort and to discreditable competition. The many broadcast appeals to save hospitals from closing their doors and so depriving hundreds of people of the benefits of modern medical services are a humiliating price for the retention of "self-help" and "individualism." It is heavy, both financially and morally. Since the war of 1914–18, an increasing proportion of the income of hospitals has been derived from contributory schemes and from patients' contributions. In 1936, the income of 965 voluntary hospitals was over £14m. Rationalization of the voluntary hospitals proceeded slowly under voluntary arrangements. Now, in 1946, a comprehensive State hospital service is being planned by the government

Of recent years public hospitals have increased in number and importance. Prior to 1929 they were generally infectious diseases hospitals, controlled by borough and county councils, or poor law hospitals, controlled by guardians and parochial boards The Local Government Act of 1929 abolished guardians and parochial boards and handed over to county councils and the larger boroughs the control of poor law hospitals, with powers to convert them into general hospitals for the sick. Authority was also given to found new general hospitals. So far these provisions have been acted on slowly, especially in Scotland. By the important power bestowed on them, local authorities now have the opportunity, in co-operation with the voluntary bodies, to build up a completely unified and planned health service.

The public hospital is slowly making headway. There is no humiliating appeal for charity. Its services are a charge on public funds. They are coming to have well-paid and highly-trained staffs, as well as the services of specialists on an honorary basis In some regions considerable progress has been made towards a comprehensive and regionally-planned hospital service. The Oxford and District Joint Hospital Board, the Manchester Joint Advisory Board, are illustrations of what has already been achieved. In Scotland, Aberdeen has been the pioneer, with its Regional Scheme under which all the local authorities, voluntary and public, in Aberdeenshire, Kincardine, Banff, and the city of Aberdeen unite to run a joint and comprehensive hospital service.

"The benefits of such a scheme are manifold," says the *Report on Scottish Health Services*, 1936. "The city gains financially by the fuller use made of its facilities. The rural areas have made available to them those institutional and other facilities with their expert advice and treatment, which can normally only be provided at large centres. The scheme also ensures uniformity in the administration of the statutory services. The regional basis of the scheme, too, makes more readily attainable a full co-operation with voluntary agencies"

ADVANCES IN MEDICAL SCIENCE

The public health activities of the State were stimulated by the progress of industrialization. They were conditioned by advances in medical knowledge. One of the most remarkable achievements was in the realm of bacteriology * The outstanding pioneer in this field was Pasteur (1822–95). As a result of researches into the process of fermentation in the wine industry of France, he was able to dispose of the old yet still current belief that the smaller micro-organisms are generated spontaneously. His simple and convincing experiment showed that "the most putrescible liquid remained pure indefinitely if placed out of the reach of atmospheric dusts." In other words, it is living organisms from the air that cause putrefaction The next step in his studies was again related to practical problems. In 1866 the silk industry of France was being ruined by a disease which was attacking the silk-worms Pasteur was able to show that infection was taking place through the activities of a micro-organism. Some years later Pasteur was busy investigating a disease, now called anthrax, which was decimating the live stock of France. At the same time, Koch in Germany was engaged in the same problem. The discovery of the bacilli of anthrax was the stepping-stone to the discovery of the bacillary cause of many diseases, notably typhoid fever, tuberculosis, pneumonia, cholera, and diphtheria.

Two consequences followed. Public health regulations, proper sanitary arrangements, wholesome water supply, were seen to be powerful weapons in man's fight with the micro-organisms. Destroy the breeding-grounds of micro-organisms, and you destroy the danger of infection. After Sir Ronald Ross's discovery that the mosquito is the carrier of the micro-organism of malaria, the application of this principle made possible the completion of the Panama Canal. Another consequence of Pasteur's work was the adoption of a new technique of immunization. Pasteur himself had practised immunization on animals. It was left to Sir Almroth Wright to demonstrate immunization of human beings by vaccination with dead microbes. His first success was with typhoid. Thereafter the same principle was applied to give protection from tetanus, typhus, and diphtheria.

Closely associated with the work of Pasteur was the development of antiseptic surgery by Lord Lister (1827–1912). Surgery had long been cursed by the constant fear of sepsis. As late as 1870, the military hospitals of Paris were veritable nightmares to soldiers and patients alike. By a curious irony the deaths in surgical wards had increased since the introduction of anæsthesia, which made possible operations previously considered impossible. Part of the trouble was that anæsthesia came before antiseptic surgery. Davy had advocated laughing-gas as an anæsthetic in the opening years of the nineteenth century. In 1842, Dr. Long in Massachusetts successfully used ether to induce anæsthesia, and in 1846 W. T. G Morton, also of Massachusetts, demonstrated the effects of ether during an operation. The experiment was completely successful, and immediately the new device to kill pain attracted widespread attention. In January 1847 Sir James Young Simpson (1811–70) was using ether at Edinburgh in cases of childbirth A few months

* See Hogben, *Science for the Citizen*, 868.

later he was using chloroform. The effects of these discoveries on medicine and surgery were remarkable. Surgery became popular.

With the wider use of surgery, the problem of sepsis became more urgent. It was this problem that Lord Lister tackled Lister was attracted by the teaching of Pasteur, who showed that suppuration was "a fermentation" caused by micro-organisms carried in the air or on the hands or instruments of the operator. Thus Lister was led to the idea of exclusion (*asepsis*) or destruction (*antisepsis*) of such microbes by careful disinfecting. The results were immediately beneficial. Death from wound-sepsis was at once reduced. Anæsthetics and antiseptic methods made surgery safe, besides enormously widening the scope of the surgeon's art. Anæsthetics were also used successfully in cases of child labour, and the employment of antiseptic methods in obstetrical practice reduced the death-rate from puerperal fever, an advance which owes much to the teaching and practice of the Viennese doctor, Ignaz Semmelweis (1818–65) (Singer, 224).

In more recent years new devices have come to the aid of medicine and surgery, of which the most notable is electricity. As early as 1836, Guy's Hospital established the first electrical treatment department. The full development of this new resource, however, had to await the technical development of the electrical industry. In 1893, Finsen demonstrated the value of artificially-produced ultra-violet rays in combating disease. Later they were used to cure rickets and tuberculosis, the diseases of poverty and industrialism. In 1895 Rontgen discovered X-rays, an important aid to diagnosis and treatment, and three years later M and Mme. Curie discovered radium.

The great recent advances of medical science have been in the realm of nutrition. The nineteenth century learned painfully that towns and houses play a large part in the spread of disease. Many of these diseases have been completely eradicated in Britain by cleaning up the towns and providing adequate water and drainage systems. Others will soon be a thing of the past. But tens of thousands of people in this country are not getting the food necessary for physical well-being. Every year there is a tremendous toll of disease that can be traced directly to diet deficiency. The incentive to State action in the nineteenth century was specially strong because no class could escape the consequence of the epidemic-breeding-grounds of insanitary places and unwholesome water supplies. Under such circumstances no one was immune. So an epidemic of typhus or cholera had the effect of rousing the nation to a realization of the dangers of insanitary conditions Malnutrition is not so spectacular, nor are well-fed people likely to suffer conspicuously from the malnutrition of others; hence the apathy *Food, Health and Income*, the title of a Report by Sir John Orr on the adequacy of diet in relation to income, epitomizes the awakening of scientific workers to a new appreciation of the social background of disease.

In the early days of industrialism, the food requirements of man were investigated from the point of view of energy. It was assumed that the three main classes of foodstuffs, proteins, fat and carbohydrates, were all that was necessary As Professor Hogben has pointed out, this view was in keeping with the general outlook of the successful industrialist of Victorian times, who regarded workers as "hands." By the beginning of the present

century, the study of chemistry had so far advanced that it was possible to carry out investigations into diet which were impossible in earlier times. In 1881 the idea of a deficiency in diet came to Lunin, the young Russian assistant to Professor Bunge of the University of Basle, while working on the analysis of milk. He produced a synthetic milk containing the proper proportions of proteins, carbohydrates, fats and minerals. When this was given to mice they did not thrive, as they did when fed on natural milk. Bunge argued that there must be some unknown substance in milk, essential to life. Unfortunately the experiments were not continued, yet it is clear that Lunin and Bunge were on the threshold of a great discovery. Some years later, Dr. Eijkman, sent out to the East Indies by the Dutch Government, showed that the disease known as beri-beri, then decimating the native population, was due to a diet of polished rice from which the outer layers had been removed. In other words, it was due to lack of some essential diet constituent. Stimulated by his pupil's researches, Professor Pekelharing of the University of Utrecht began a series of experiments on nutrition. His important conclusion was that:

"an unrecognized substance occurs in milk which is of paramount importance for nutrition even in minute quantities . . . If it is lacking, the organism loses the ability to utilize the well-known principal components of the food, appetite is lost, *and with apparent abundance the animals die of starvation*" (Drummond and Wilbraham, *The Englishman's Food*, 508).

In 1912 Sir Frederick Gowland Hopkins showed that certain food substances were essential to life, and Funk coined the word "vitamin" to denote these mysterious substances. The war of 1914–18 greatly stimulated inquiry into nutrition and deficiency diseases. Soon the dietetic causes of several diseases were laid bare. For example, Sir Edward Mellanby discovered the existence of vitamin D, a substance intimately connected with bone-formation. Rickets, a disease of industrialism, was thus shown to be due to a deficient diet. Scurvy, long known to be associated with the lack of vegetables and fruit, has been shown to be due to the absence of vitamin C, found in fresh vegetables and fruit. Since the war of 1914–18, one advance after another has been made in the science of nutrition. It holds out the hope of a vast improvement in the general health and physique of the nation.

POPULATION CHANGES

Progress of agriculture, manufactures and transport conditioned the increase in the population of Great Britain in the nineteenth century. The absence of improved agriculture and expanding industry, on the other hand, drove people from Ireland to England, Scotland, and the United States. Between 1851 and 1901 the population of Great Britain rose from 20·8 to 37m; that of Ireland fell from 6·5 to 4·3m. The fall in the death-rate was at the root of the increase in numbers. In England and Wales, deaths per thousand living at all ages fell from 22·7 (1851–5) to 14·3 (1911–15) and to 11·8 in 1934.

Until the twentieth century there was no great fall in the death-rate of infants. In 1851–5 the death-rate of infants under one year, per 1,000 births

in England and Wales, was 156. Thereafter it fluctuated slightly, but when the century ended the figure was still 156 (1896–1900). A new era opened in the present century when, as we have seen, increased attention was paid to the welfare of mothers and infants. In 1901–5 the figure dropped to 138; then to 110 in 1911–15; in 1921–25 it was 76, and in 1936–40, 55. In Scotland the crude death-rate fell from 21·5 per 1,000 of the population in 1860–2 to 13·4 in the period 1930–2. Over that period of 70 years the death-rate for infants declined by 35·5 per cent, for children aged one to four years by 73 per cent, for children aged five to nine by 72·5 per cent, for children aged ten to fourteen by 68 per cent respectively (*Scottish Health Services Report*, 47). The improvement in the infant mortality rate, as in England, has been restricted to the present century, but the infantile death-rate is higher in Scotland than in England; and higher in industrial areas than in residential and non-industrial areas. In 1936–40 the infant death-rate for Scotland was 76 per 1,000; in Edinburgh it was 66, in Aberdeen 76, in Dundee 77, and in Glasgow 99.

Since the 1870's there has been a steady fall in birth-rate. The births per 1,000 married women has fallen from 292·5 in 1871, to 197·4 in 1911, and to 110 4 in 1933 (*World Population*, by A. M. Carr-Saunders, 1936, 94). It is generally agreed that the immediate cause of this fall in the birth-rate is the use of contraceptives. Starting with the rich, a fashion for small families has gradually spread downwards, and has now extended to every level in the social scale.

Fall of the birth-rate has been accompanied by a fall in the death-rate, the consequence of improved health. So though population has actually been increasing, the rate of increase has been slowing down. We are now on the threshold of a stationary population. Unless a change occurs, we shall soon be a declining population.*

One result is that we are becoming a nation of *older* people. Already there are signs of capital and labour shifting from industries that cater for children to those that serve the needs of older people. Fifty years ago the total number of men and women over sixty-five in England and Wales was 1·2m, in 1935 it was about 3m. The present century, which has now run almost one-half of its course, has doubled the numbers of old people; before the century is out the number will be doubled again, but the total population will possibly be down to the level of 1890.

The important social fact that the population of Britain will soon begin to decline has been stressed by many writers in recent years. By 1926 "the gross reproduction rate" of England and Wales was already below unity. This means that the number of girls who might become mothers, born to 100 mothers of child-bearing age, married and unmarried, was less than 100. The gross reproduction rate for 1933 was 0 845. "This means," says Dr. Charles, "that whatever changes in mortality ensue, *nothing can arrest a continuous decline of the total population, unless something happens to increase fertility*

* These problems have been the subject of an exhaustive inquiry by a group of scholars, including Professor Kuczynski, Dr. Enid Charles, Mr. D V Glass, and Professor J L Gray. The result of their inquiries has been published in *Political Arithmetic, a Symposium of Population Studies*, under the editorship of Professor Hogben.

above its present level." Since all girls do not reach womanhood and pass through the child-bearing age, the "net reproduction rate," i.e. the average number of adult girl children per mother, is lower still. The gross reproduction rate of Scotland has been higher in recent years but, because of emigration, the Census of 1931 registered a decline of about 40,000 over the 1921 Census. This retreat from parenthood is not confined to our own country. In France, Germany, Belgium, Denmark, Sweden and Austria, similar forces were at work, and a fall in population in the next thirty or forty years is inevitable. In the United States population was no more than replacing itself in 1931. There, too, a fall seems probable, unless prevented by immigration.

PART II

Our Work

CHAPTER VI

RISE OF CAPITALISM

THE term "capitalism" is familiar to most people as a name for the economic system of Britain and the U.S.A. during the past century. Its distinguishing features are: *first*, that the ownership of the capital resources of the country is in the hands of a relatively small proportion of the people and that the masses are dependent on them for employment; *second*, that the calculus of profit determines to what use such resources shall be put. One might add a third feature, the price system—through which the profit motive works. In any economic system some decisions must be made about quantities and sorts of goods to be produced, the amount of capital to be saved, and the different types of labour to be employed Under capitalism it is through the price system that such decisions are made. One of its functions is to restrict supplies. As things are, most goods are relatively scarce and the demand is greater than the supply The price system restricts demand by keeping up prices when supplies are short. It thus reserves supplies for those who can pay for them. Justice and human needs do not enter into the calculation. On the other hand, prices fall when supplies are large. So consumption goes up. This mechanism, which adjusts supply to demand, does not always work so smoothly. It sometimes breaks down, as in times of glut. Goods may then be destroyed because it is impossible to sell at a profit.

In a planned economy, as for instance in the U.S.S.R, some estimate is made of the quantity of different classes of goods needed, and the industrial machine is then set going to produce the requisite amount. Under capitalist production it is the price mechanism which determines this Increased demand is reflected in higher prices, and this stimulates increased production. If it is more profitable to produce motor-cars than dwelling-houses, motor-cars are produced. Along with other agencies, the price mechanism also determines what occupations people will follow, as well as the amount of capital to be saved, and where it will be invested.

In this chapter we shall consider how this system arose In most countries of Europe during the early Middle Ages, the capitalist system in the sense in which we have described it did not exist The mass of the people were attached to the land. Their work was directed to the immediate satisfaction of their own wants and those of their feudal superiors The profit motive had little to do with it People grew food for their own consumption, and the kinds and quantities of crops raised were determined by basic human needs. The peasant would not think of sowing oats and wheat and leaving no land

for barley. His own needs told him that he required ale as well as bread for his table. His decisions were not based on the prospect of profit, but on his own needs and those of his family. There was no place for the merchant. Normally there was no surplus except what an overlord might claim.

This does not mean, of course, that there was no coming and going between one district and another. Under conditions when bad harvests and famine were an ever-present danger, a district which had run short would try to make good its deficiency from others. The trade thus established prepared the way for the corn market and the rise of capitalism in agriculture, but for many centuries it was simply an accessory of the primitive, self-sufficing agricultural system. There was no merchant class, and few craftsmen other than smiths and weavers, attached to the villages, living the same life as that of the peasants Because of natural advantages for the production of certain commodities, such as salt or fish or iron, some districts were able to supply a wider area than their own Or again, because of some special quality in their wool, one district might make finer cloth than another, and so exchange would arise. However, such exceptional transactions were relatively small. A predominantly agricultural self-sufficing economy remained unimpaired in most countries for many centuries, and in some districts until quite recent times.

THE RISE OF THE MERCHANT CLASS

The gradual emergence of a merchant class and the breakdown of the economic barriers that isolated one district from another is one of the outstanding features of medieval history. We know little of how the merchant class arose. Pirenne (*A History of Europe*, 1936) suggests that it sprang less from the peasantry, who were too closely tied to the soil, than from vagrants and adventurers who roamed the country at large, living a life which brought them into contact with different classes and different places, and gave them opportunities for exchange of goods The ease with which money could be made by buying goods cheap and selling them dear may well have whetted an appetite which became a consuming passion for profit. Such merchants were the first *bourgeoisie* in the modern sense, actuated in their dealings by a consistent desire to become rich. Their activities heralded the dawn of capitalism in modern Europe.

In the course of time they settled at points convenient for their calling It might be at a pass, by a river crossing, or near a monastery. As their numbers grew they banded themselves together into merchant guilds to safeguard for themselves monopoly of trade in their own towns or districts From being carriers and rather disreputable pedlars and packmen, they became respectable merchants, and in time influential citizens of the towns which they helped to establish in the twelfth and thirteenth centuries.

"The history of European commerce," says Pirenne, "... did not begin with petty local transactions which gradually developed in importance and in range. On the contrary, it began, in conformity with the stimulus which it received from the outer world, with long-range trading and the spirit of the big business—big in the relative sense. It was dominated by the capitalist spirit, and this spirit was even more potent in the beginning than later on. Those who initiated

and directed and expanded the commerce of Europe were a class of merchant-adventurers. This class was responsible for reviving urban life, and in this sense we must refer to this class the origin of the *bourgeoisie*" (*A History of Europe*, by Henri Pirenne, 1936, 213).

THE REVIVAL OF COMMERCE

In Roman times and for centuries afterwards, there had been trade and urban life. The Mediterranean had been the highway of commerce joining east and west; but the advance of the Moslem power in the eighth century and its consolidation along the eastern, southern and western shores of the Mediterranean checked trade and set up a barrier between the east, the source of the most precious things demanded by the wealthy European, and the west. Commerce declined and urban life languished. Trading enterprise revived at the end of the eleventh century, and the Crusades played a leading part in its revival. For two centuries, wave after wave of Christians advanced against the Moslem, harried their ships in the Mediterranean, and drove them eastwards whence they had come. Gradually Palestine and the eastern shores of the Mediterranean were wrenched from their grasp. The wedge which the Moslem power had driven between east and west was dislodged. The paths of commerce were once more opened.

The merchants of Venice were ready enough to seize the opportunity offered by the Crusaders for the extension of their trade with Constantinople and the eastern Mediterranean. Founded by fugitives at the time of the Lombard invasions, Venice now became the first merchant republic under the government of a *Doge* or Duke. From this point her policy was directed exclusively by commercial interests. Her merchants carried troops and stores for the Crusaders. In return they secured trading privileges. As a consequence they were able to establish trading-posts all along the eastern Mediterranean from Alexandria in Egypt to Constantinople, and to Trebizond on the Black Sea. From these "factories" as they were called, their galleys, laden with spices and silks, gold and silver ornaments, carpets and tapestries, precious stones and porcelain, goods which had been brought from Persia, India, and China, sailed back to Venice. From Venice the goods were distributed to western Europe by land and sea. The land route was over the Brenner and St. Gotthard Passes, the sea route by Gibraltar and the English Channel. Both terminated in the Low Countries, which thereby acquired great importance as an international market

The other centre of trade in the Middle Ages was the Baltic. It also owed something of its importance to Constantinople and the Far East. For a trickle of goods moved northwards up the river system of Russia to the Gulf of Bothnia and the Gulf of Finland. From the middle of the ninth century the Scandinavians were carrying on trade by way of the Dnieper Two centuries later it began to decline. Their place in the Baltic was quickly taken by a group of German towns—notably Hamburg, Bremen and Lubeck—which later formed a commercial alliance called the Hanseatic League. The Baltic countries had an economic importance of their own, because they produced such commodities as tar, timber, salt, fur and fish, all of which were

in constant demand in other European countries. Hence the centre of economic activity in the Baltic moved westwards from Finland and Novgorod to Danzig, Lubeck and Hamburg As the German towns gained in strength they established trading-stations abroad, the chief of which were in Bergen, London, and Bruges (Fig. 24).

The meeting-place of Venetian and Baltic merchants was Flanders. Thus "the two commercial worlds, the northern and the southern, touched and intermingled," says Pirenne Of the two groups of merchants, the Italians were the more advanced, for they had learned much about the arts of finance in their dealings with the more highly civilized east. Banking, bills of exchange, lending money at interest, commercial partnerships and companies were first practised in Italy. From Italy knowledge spread northwards to Flanders. In the international market of Bruges, the chief commercial town of the Low Countries, merchants of other countries learned something of the machinery of capitalistic marketing.

Here, then, was the beginning of capitalism in Europe. The merchants who took part in this trade were actuated by the profit motive. They bought cheap and sold dear, and they regarded difference of price as the reward of their service; but one must not exaggerate the importance of this trade. The mass of the people still pursued their agricultural occupations or handicraft untouched by the new spirit.

TOWN LIFE IN ENGLAND

Once England had fully recovered from the disturbance to her national life consequent on the Norman Conquest, town life developed rapidly Close contacts established with the Continent encouraged trade and the growth of municipal institutions. At first, many English towns were simply villages with no corporate life. Their citizens were indistinguishable from the peasantry of the countryside. As the years passed, some of the people devoted more and more of their time to crafts and less and less to agriculture. Gradually division of labour arose between the growing town and the surrounding country. The weekly market was the institution evolved for the exchange of goods. Sometimes the growth of a particular town gained from its situation, which might be on some well-beaten track, or at some convenient river crossing, or where there was a good natural harbour. Sometimes it was the presence of a castle or a monastery or a cathedral which was the formative influence.

However the town grew, its first essential was freedom from external influence Only in an atmosphere of such freedom could trade and crafts develop. To begin with, the inhabitants of these embryo towns were tenants or serfs of the neighbouring lord, and therefore subject to all the disabilities such status involved. Their first objective, therefore, was to secure freedom from the rule of the baron. They wanted to commute their services for money rents and to free themselves from feudal obligations. The struggle to secure this varied in intensity according to whether the lord was the King, or a lay baron, or the Church. Kings and many lords were usually glad enough to sell their rights for money, but the Church was difficult to deal with and

clung tenaciously to its privileges, in some places for many centuries. A second objective of the townspeople was to be directly responsible to the Exchequer for their taxes, and to have the administration of justice in their own hands, thus excluding the King's sheriff who was often an unscrupulous and tyrannical official. These privileges were usually secured by obtaining a charter from the Crown. The twelfth and thirteenth centuries were the golden age of charters.

In these early days the chief trade of a town was with the surrounding countryside. Any long-distance trade was generally with other towns rather than with foreign countries. Thus the country tended to be covered not by one economic unit but by a great many grouped round the main towns. Since the town was the heart of the trade of its own district, control over trade was generally exercised, not by the State, but by the town authorities. Hence in each town those engaged in crafts and trade banded themselves into a merchant guild, which exercised supervision over economic affairs, and sought to maintain for its members a monopoly of the trade of the town and sometimes of the district. Thus the typical member of the merchant guild was not the "merchant" in our modern sense, but the craftsman who bought his own raw material, fashioned it into the finished article, which he then sold to the consumer Sometimes he simply worked up material brought to him by his customer. In short, anyone who did any buying and selling, whether craftsman or not, was regarded as a merchant. In the main, the medieval town was a classless society.

There were, however, forces at work promoting social differentiation. Some members of the guild, either through profitable local transactions or through the appreciation of land values, became more wealthy than their neighbours. As their wealth increased they would devote their major activities to the larger operations of commerce Meanwhile, English craftsmen belonging to the same craft were forming guilds of their own, and as the number of these craft guilds increased, the parent body—the merchant guild—declined in importance until eventually it disappeared, or lingered on as the aggregate of the several craft guilds of the town. A wealthy member of the merchant guild who wished to resign his craft and confine himself to buying and selling found opportunities in foreign trade, hitherto largely in the hands of foreigners.

The trade in spices, silks and other goods, which had its focus in the Low Countries, was obviously a fruitful field for such enterprise. Merchants engaged in it followed the time-honoured custom of forming their own guilds. By the fourteenth century there were a number of wealthy mercantile guilds—such as the Grocers, the Merchant Tailors, the Haberdashers, the Drapers and so on The majority of their members were drawn from London, which curiously enough never appears to have had a merchant guild As they increased in power they sought charters from the Crown, and this aroused much opposition, because they claimed the exclusive right to deal in certain commodities. The appearance of these mercantile guilds means that a class of merchants in the modern sense had now differentiated itself from the craftsmen.

About the same time, English merchants were beginning to engage in

export trade. Across in Flanders there was a flourishing cloth industry which far outrivalled that of other countries in the fourteenth century. The famous looms of Ypres, Bruges, Ghent, Mechlin, created a demand for fine wool partly supplied from the Cotswolds, Yorkshire and the Cheviots. In the collection and buying of the wool clip, in the transport of it across the seas to Flanders, many Englishmen rose to positions of great affluence and power. These men were merchants whose capital was invested in wool, and whose every operation was guided by the profit motive. Eileen Power has given us realistic pictures of some of these merchants, whose virtues and achievements have been handed down to posterity in the magnificent brasses which can be seen in many parish churches in the Cotswolds and other wool-producing districts.

> "At Chipping Camden," she writes, "lies William Grevel with his wife, late citizen of London and flower of the wool merchants of all England, who died in 1401, and his beautiful house still stands in the village street. At Northleach lies John Fortey, who rebuilt the nave before he died in 1458; his brass shows him with one foot on a sheep and the other on a woolpack, and the brasses of Thomas Fortey, 'woolman,' and of another unknown merchant, with a woolpack, lie near by"

The wool merchants formed a trading fraternity called the *Merchants of the Staple.* In the fourteenth and fifteenth centuries it was a very flourishing body. Membership was open to anyone who paid the fees and agreed to abide by the rules, but each member traded with his own capital. So it was not a joint stock company. The term *staple* literally means a market. The custom was to carry on the trade through an agreed port or ports, for in this way the operations of the merchants could be more easily regulated, and the collection of the King's customs more conveniently effected. From time to time, different towns were chosen as the Staple, but from the end of the fourteenth century it was fixed permanently at Calais until that town was lost to England in 1558 By that time, however, the export of wool had greatly declined, and with it the importance of the Merchants of the Staple. The growth of the English cloth industry had created an expanding market for wool at home. The rise of the cloth industry led to the creation of another body of traders called the *Merchant Adventurers* Eventually it claimed the exclusive right to export cloth. It was a more vigorous body than the Staplers, because it dealt with the products of an expanding industry. Its growth was slow; but by Tudor times it was a powerful and influential body, carrying on trade through Bruges, Antwerp and Hamburg.

The *Merchant Adventurers* stood for the divine right of English merchants to carry on English trade, and for the privileges of its own members as against those of any other Englishmen It fostered and fed the flames of nationalism in the sixteenth century. Its great rival was not the Merchants of the Staple, now a decaying body, but the German Hanseatic League, which still retained its privileged position in London, just as European powers enjoyed until recently settlements and extra-territorial rights in Shanghai and other eastern ports. Then, as now, such privileges were a challenge. After many acrimonious disputes and numerous political complications, the German merchants were

expelled from London. This happened in 1597. They were later allowed to return, but only on the same footing as other merchants. Meantime other English companies were formed to trade with Russia, Scandinavia, and the Levant.

In Scotland and on the Continent capitalist development followed somewhat different lines. North of the Border the merchant guild, or guildry, as it was usually called, was an exclusive body from a very early stage in its history. In the Guild Statutes of Berwick (twelfth century), for instance, it was ordained "that no butcher, as long as he chooses to practise his trade, buy wool or hides, unless he will abjure his axe and swear that he will not lay his hand upon beasts" (Guild Statutes, xxx). By the fifteenth century, exclusiveness had been carried to such a degree that the craftsmen commenced to form guilds of their own. These were called Incorporated Trades Between the guildries and the incorporated trades a bitter feud was waged for several centuries, for in Scotland the guildries did not disappear with the formation of the craft organizations as had happened in England On the one hand, the merchants sought to retain the monopoly of all buying and selling as well as of foreign trade. On the other, the craftsmen fought for the right of self-government and the right to deal in the articles which they made. In most Scottish towns compromises were arrived at in the late sixteenth century, but class warfare was waged for another two hundred years. The merchants of the Royal Burghs retained the control of foreign trade, which they organized through the Convention of Royal Burghs. Like the English, they fixed on a staple town abroad, in this case it was Veere in Holland. This organization remained vigorous until the eighteenth century. It was not until 1846, however, that the privileges of the guildry and incorporated trades were finally abolished. Thereafter they confined their attentions to provident and educational objects, as they still do to-day. The close association of the guildry and town government throughout the centuries is marked to-day by the presence in most Scottish Town Councils of the Dean of Guild, the only non-elected member.

THE RISE OF CAPITALISM IN INDUSTRY

There were signs of class divisions within the craft guilds during the fourteenth century. They heralded the approach of capitalism in industry as distinct from commerce. The movement of people to the towns and the natural increase of population made the older established craftsman look to his rights and view with jealousy the increasing number of entrants into the crafts. In their hey-day the guilds had been largely classless bodies. A youth served his apprenticeship, perhaps remained for a year or two as a journeyman, and then set up shop for himself as a master craftsman Even before 1400 this routine had ceased to work smoothly There were complaints that the guilds were raising entry fees and in various ways restricting admission to the craft. Frequent disputes between masters and journeymen over such matters as hours and wages showed the existence of a clash of interest The journeymen reacted to the new conditions by forming guilds of their own. These yeomen or journeymen guilds foreshadowed the modern trade

union. At first, the older guilds tried to suppress them, and were aided in this by the municipal authorities and the State itself. Indeed an Act passed in 1548 resembles in many ways the famous Combination Law of 1799. It recited that artificers

"have made confederacies and promises and have sworn mutual oaths, not only that they should not meddle one with another's work and perform and finish that another hath begun, but also to constitute and appoint how much work they should do in a day and what hours and times they shall work, contrary to the laws and statutes of the realm."

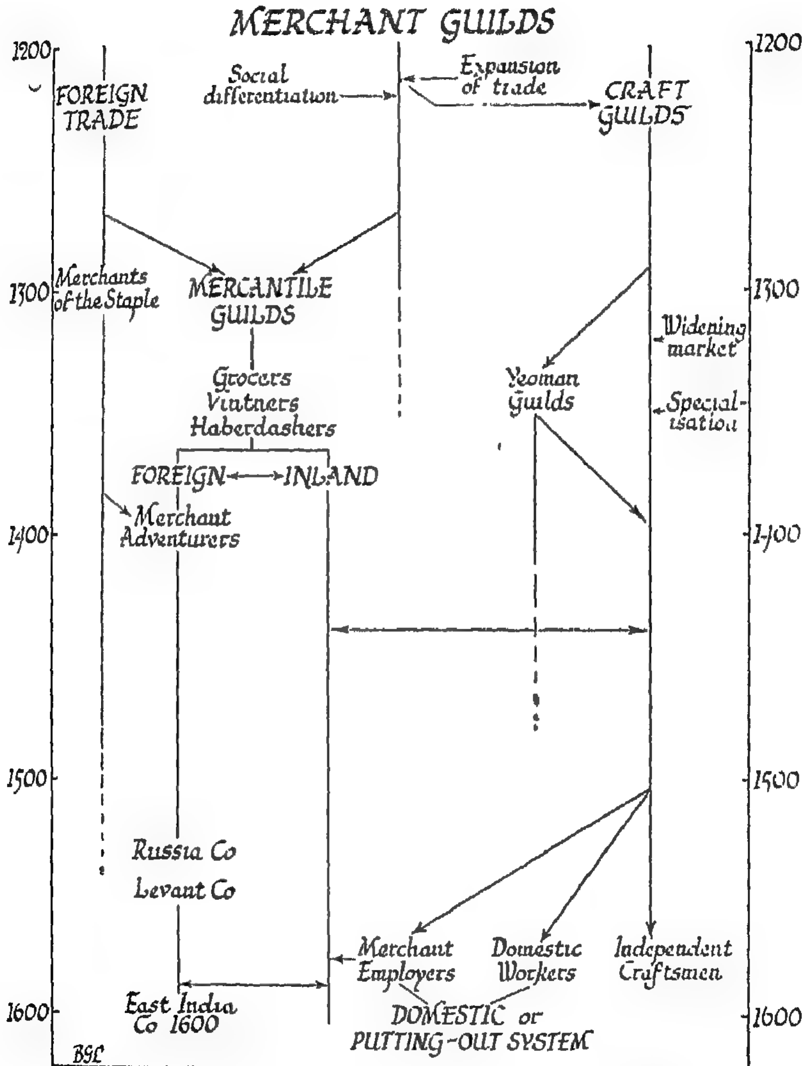
Sometimes the masters compromised by assigning certain functions to the journeymen guilds, which made them in effect subordinate parts of the craft guild itself The significance of the yeomen guilds is that they mark the beginnings of the capitalist system in industry. Under the craft guild system, the market was generally a local one, and division of labour between crafts was based on the production of finished commodities. A single craft stood between the raw material and the consumer. The weaver obtained his yarn from the housewife, the traditional spinner or spinster, and made cloth which he sold to the consumer. This simple state of affairs could not be permanent.

There were two forces at work creating a more complicated economic system. First, there was the widening market. So long as trade was confined to the town it was easy for the craftsman to keep in touch with his customers A wider market made this difficult, if not impossible. The final consumer of his goods might be in another town or another country The craftsman could not hope to keep in touch with him or to carry through the whole transaction himself. By himself, he would be unable to finance the complete transaction from the buying of the raw material to the selling of finished goods, because this would involve laying out money over a lengthy period of time. In other words, the time had come when there was room for someone with capital and knowledge of the market to act as intermediary between producer and consumer.

Another circumstance operated to the same end. Division of labour tended to disintegrate the processes of production. The making of a single commodity came to be split up into several processes, each being occupied by a single craft. Thus we find distinct crafts of wool-combers, carders, weavers, fullers, dyers and drapers in the woollen industry. The production of cloth thus became the work of a group of separate crafts, many of which never came into direct contact with the consumer. This involved successive sales of partly finished goods; the combers selling wool to the spinners, the spinners selling yarn to the weavers, the weavers selling grey cloth to the fullers and dyers, and so on. This stage of industrial development furnished the basis for the capitalistic control of industry On the one hand, the subdivision of processes made the craftsmen more expert at their jobs, but it also created the necessity for some sort of co-ordination between the crafts.

It was at this point that the capitalist merchant-employer came on the scene. He combined the functions of merchant and employer. He purchased the raw material, gave it out to the craftsmen, and then sold the finished

article.* The craftsmen were in fact his employees. Though they generally worked at home or in their own workshops and with their own tools, they were dependent for employment on the merchant, who paid them on a piecework basis. There were, of course, many intermediate steps and many varia-



TIME CHART 8. FROM GUILD TO DOMESTIC SYSTEM

tions in the development of this system For example, a small dealer or merchant might get his raw materials on credit from a larger dealer, or the larger dealer might work on a credit system with London merchants. But the general principle was the same—the direction of the commercial side of this industry by the merchant, and ultimately the control of production as well The indus-

trial system thus created has been called the *domestic* or *putting-out* system. Under the guild system the industrial and mercantile functions were combined in the hands of the craftsman; under the domestic system these functions were separated. The merchant managed the commercial side directly, and left the craftsman a purely manual function.

The domestic worker still owned his tools, and, to a certain extent, was his own master. He worked at home or in his own little workshop, but he no longer owned the materials on which he worked. He was in effect a wage-earner, working on a piecework basis for a capitalist employer. The market was the pace-maker and production for profit the power that moved the industrial system. The domestic or putting-out system first appeared on the Continent as early as the thirteenth century. In Bruges, Ghent, St. Omer, Brussels, Lille, and Dinant, where the cloth industry flourished long before it was of any consequence in England, the capitalist merchant was a common figure. He purchased wool in bulk in England and Spain, had it sorted at his warehouse, and then gave it out to spinners who were paid a piece wage on returning the yarn. Next it was given out to weavers, and later to other classes of craftsmen Thus the merchant was really a big employer of labour. To be sure, the spinners and weavers worked in their own homes; but the finishing processes, like fulling and dyeing, were often done on the employer's premises under his direct supervision. In Italy, the Florentine cloth merchant was also a big employer of labour. In the silk industry of Bologna and Lucca there was something approximating to a factory system, where women and children were employed to work machines driven by water-power.

In Britain the domestic system appeared first in the woollen industry, and in course of time it became the predominant type of productive organization, and remained so until the industrial revolution of the eighteenth century. In terms of output, the domestic system was an advance over the guild system with its restrictive policies and its petty tyranny. The new merchant-capitalist was impatient of petty localism, well suited to guild conditions but quite incompatible with the wider operations of commerce in which he was now concerned. He stood for the right of the merchant to carry on his business in whatever way he wished. The only restrictions he asked for were protection from the foreigner In short, the transition from the guild to the domestic system coincides with the transition from what has been termed a town economy to a national economy. Some of the capitalists of the new era went further. They stood for internationalism, for the right of the capitalist to carry on his business in whatever country he wished. In Elizabeth's day, the domestic system was by no means universal, even in the woollen industry. The typical figures in England at this time were the peasant and the small master-craftsman, employing his journeyman and one or two apprentices. Yet everywhere, in farming as well as in industry, there was evidence that the old social order was being gradually transformed by the rise of capitalist enterprise. The object of much Tudor social legislation was to check the resulting social ferment.

THE FINANCIER AND INDUSTRY

Long before this time, peasant and small master were gradually coming under the control of the financier. As Tawney points out, borrowing and lending were not new phenomena. The very structure of agriculture was based on waiting between sowing and reaping, and, therefore, credit transactions were common even in medieval times. All sorts of devices were used to circumvent the legal prohibition of usury. "Quite apart from the great financial dealings of kings and nobles, monasteries, bishops and the papacy, which strike the eye at once, even a cursory glance at the life of a medieval manor or borough shows credit transactions springing spontaneously, even in a commercial backwater like England, from the ordinary necessities of humble people, who may curse the lender but who cannot dispense with loans."* In the towns there were native goldsmiths, and foreigners like Lombards who specialized in finance, but throughout the country districts money-lending was simply a by-employment of the yeoman or the parson or the innkeeper.

Though he was not dependent on the vagaries of the season, the craftsman, like the peasant, was also dependent on the money-lender. Sometimes he required capital to set up shop, and having started to borrow found it difficult to leave off. He could carry a bigger stock of goods on borrowed money, and he could wait a little longer for payment for his finished product. The money-lender preyed upon the fears and the economic necessities of the poor craftsman. He was, in short, "an insatiable usurer which gnaws the poor people daily to the very bones." In a sense, the worst excesses of this system were a disease of the pre-capitalist era, for it was lack of capital and the absence of a developed financial organization that placed the small man in the clutches of the unscrupulous money-lender.

The borrowings of such people fade into insignificance compared with those of the large landed proprietor. In the sixteenth century it was common for landowners to mortgage their estates or raise money in other ways to maintain their standard of living in face of soaring prices that followed debasement of currency and import of bullion from America. Meanwhile the merchants benefited from the rising prices. The class balance was being upset. As the merchant class rose to affluence and power, the landed people suffered. "For a considerable part of their land," says Tawney, "the gentry are only the caretakers of the city merchant." Land passed from the old feudal nobility and petty squires to the new mercantile class, which gradually acquired dominion over them by lending them the money they needed.

By the sixteenth century the woollen industry had been largely transformed to a capitalist basis in the eastern and western counties. There was therefore ample room for the financier. Graziers required advances to enable them to buy sheep. Large clothiers incurred a considerable outlay on stock given out to spinners and weavers. If the cloth was destined for foreign markets, the clothier might have to wait for payment from the exporter. "At every point in the complex industry," says Tawney, "from the breeding of sheep to the sale of cloth, credit intervened to bridge the gap between the

* *A Discourse upon Usury*, by Thomas Wilson, intro R. H Tawney, 1923, 20.

successive stages." The complexity of the industry, the dependence of one part on another and on the mechanism of credit, made it specially vulnerable to political and economic shocks. Depression of trade brought widespread unemployment to weavers and great loss to merchants left with cloth on their hands.

The establishment of this new order in the sixteenth century signalizes the triumph of a new class. The *bourgeoisie* came to secure an increasing share of local and national government. Tudor administrators at first looked with dismay on the rise of commercialism and the social ferment created by unrestricted pursuit of profit They endeavoured to check the worst abuses, and tried to solve the problem by putting the clock back. They ordered enclosures to be thrown down, and sheep walks to be returned to tillage. They tried to restrict the number of looms a weaver might possess. In these and many other ways they strove to check the growth of the new system, but without avail. The forces they sought to control were too strong for them.

THE ECONOMIC REVOLUTION OF THE SIXTEENTH CENTURY

Changes taking place in the England of Tudor times were part of a wider economic revolution now rocking Europe to its foundations. For a century before Columbus crossed the Atlantic and Da Gama rounded the Cape, economic power was slowly moving from its medieval home in the Mediterranean to the western seaboard of Europe The south German towns, lying on the overland route, enriched themselves by the business of commerce In particular, Flanders, meeting-place of Venetian and Hansard, steadily added to its already considerable commercial and industrial importance. The vigorous economic life of these regions could not be restrained in a strait-jacket of medieval trade restrictions. No longer content to confine themselves to their own cities, merchant-capitalists who had learned the arts of finance and trade from the Venetians looked farther afield for profitable investment. They found new opportunities by lending to monarchs and princes, by financing trade and by opening up copper and silver mines. As they grew in strength and economic importance, they became impatient of the Venetian monopoly of eastern goods Economic necessity directed the search for an alternative route to the sources of such goods.

Such was the driving force. The ground was being tilled in various ways. Travellers and merchants were gradually amassing knowledge about the Far East and its potentialities. Some of the more prosperous ones possessed road maps, itineraries, word-books, and tables of comparative money values to serve their purpose anywhere between Venice and Pekin. We get a glimpse of the extent of knowledge thus acquired in the record of Marco Polo's wanderings at the end of the thirteenth century The long voyages round the Cape and to America owed much to new knowledge of navigation, astronomy and map-making; but such studies were themselves stimulated by the desire of seamen to desert beaten tracks and venture into uncharted zones. The discovery of an alternative route to the riches of the East did much to stimulate the great outburst of interest and inquiry into the problems of navigation.

"The Discoveries," says Tawney, "were neither a happy accident nor the fruit of the disinterested curiosity of science They were the climax of almost a century of patient economic effort. They were as practical in their outcome as the steam engine."

Thus the Portuguese had already established a place for themselves in trade before Henry the Navigator (1394–1460) evinced his great interest in the science of navigation. His efforts were aided by earlier progress of ship construction and the use of the compass, already known to Norse navigators in the eleventh century. The story of the great geographical discoveries is a familiar theme. In 1487 Bartholomew Diaz reached the Cape, and in 1498 Vasco da Gama reached Calicut in India. About the same time Columbus was planning to discover an alternative route to India, and in 1492 by crossing the Atlantic he discovered the West Indies and America. These vast discoveries came at a time when Europe was in the throes of transition from medieval to modern times. The rise of capitalism was shattering old relationships, creating a new and powerful class of merchant-capitalists, and bringing the influence of the market to bear on sleepy communities which had changed but little for centuries.

Needless to say, there were vast stretches of Europe quite unaffected by the new forces. But in Italy, Germany, the Low Countries, and England, change was rapid and profound. A new spirit of inquiry, growing interest in the physical world, desire to break with tradition and apply reason to the problems of everyday life, were simply different facets of one and the same social pattern The rise of capitalism, the Renaissance, the Reformation, the growth of nationalism, cannot be dissociated. Intellectual ferment was closely associated with the expanding material framework of society. The methods of capitalism infected all departments of life, notably scientific inquiry, when the invention of printing about 1450 prepared the way for the spread of knowledge.

Under the strains and stresses of these new forces, Europe was called to face the consequence of the great geographical discoveries. Oriental produce could now be shipped in larger quantities and at lower cost direct to Lisbon From Mexico and Peru silver flowed to Spain. Expanding commerce and the greater volume of goods carried alike required financing and distribution throughout Europe. Neither the Portuguese nor the Spaniards had the understanding of economic affairs to do this. It was left to German and Flemish capitalists to add this trade to their already substantial business activities. The new commerce naturally gave an advantage to countries on the Atlantic seaboard. So it was to the Low Countries that south German financiers and capitalist merchants now moved to carry on their business Bruges took second place to Antwerp with its better harbour and ready access to the sea. With a rapidity that astonished contemporaries, Antwerp rose to be the economic hub of the universe, gathering to itself the old trade in English cloth, German fustians and Hungarian copper, as well as the new trade in spices from the East Her own industrial hinterland, home of the fine cloth and munitions industries of Europe, added to her greatness. Its most typical institution was its *bourse* or produce exchange; its dominant personnel, the international financier.

Antwerp symbolized the spirit of the new age. It stood for freedom for all to trade on equal terms even with its own citizens. Over the portals of its great international exchange was inscribed the significant dedication: *Ad usum Mercatorum cuiusque gentis ac linguae.* Ehrenberg says this was the first world produce market. The business of buying and selling was done by means of securities without actual exhibition or physical transfer of the goods themselves. What made this possible was steady and abundant flow of commodities, and the nature of goods adapted to grading and to selling by sample. English cloth and eastern spices, especially pepper, which the Portuguese sold in bulk to German syndicates, were the chief commodities The transport and marketing of all this produce required capital, and this gave the great financiers their greatest opportunity.

Capital resources were concentrated at Antwerp, and at lesser financial centres such as Lyons, Venice, Frankfurt, Paris, Rouen, Strasburg, Seville, and London, all of which were knit together into a complicated and sensitive financial organization by the residence of representatives of the great financiers. The common medium of exchange was the bill on Antwerp which could be readily cashed in any of these commercial centres. As the scale of operations extended, the variety of their business increased. The great *Fugger* House is typical of the times. They began as merchants in their own hometown of Augsburg, where they dealt in spices, silks and woollen goods. Like other great merchants of the time they had a warehouse in the *Fondaco dei Tedeschi* in Venice. Later they added bill discounting to their business. This activity brought them into mining, because a prince's best security was mining rights in his territory. At the height of their power they had agents in all the great towns of Europe.*

Naturally this complex international economic system got a powerful stimulus from geographical discoveries which increased the scale of trade and offered tempting new opportunities for big profits. An important facet of the discoveries was abundance of precious metals from the New World. In the fifteenth century, Europe was faced with a gold and silver famine. Increased trade (which marked the end of the Middle Ages) and spread of a money economy, strained a situation already serious. Under the stimulus of the rising prices of silver and gold, capital turned to the problem of increasing the output of European mines. In the sixteenth century the mines in the Tyrol and in Germany were worked with increased vigour and with more efficient equipment. From the early years of the century, a gradually increasing stream of gold and silver flowed from the New World to Spain. Then came in 1545 the discovery of the Potosi silver mines of Peru, followed soon afterwards by that of mines in Mexico The stream became a torrent. Between 1521 and 1660 about 18,000 tons of silver and about 200 tons of gold were sent in government ships to Spain. A considerable quantity must also have been smuggled into Europe.

By whatever means they came, the ultimate effect was to raise the general level of prices, a process already in operation through the debasement of the currency. E. J. Hamilton† shows that Spanish prices rose threefold in

* See *Capital and Finance in the Age of the Renaissance*, by Richard Ehrenberg, translated by H M. Lucas, London, 1928

† *American Treasure and the Price Revolution in Spain, 1501–1650*, 1934

the sixteenth century.* For the years 1601–10 they averaged about 3·4 times the mean of 1501–10. The bullion did not all remain in Spain. Gradually it spread over Europe. Everywhere the effects were the same. At the beginning of the Civil War, for instance, prices in England were 3·5 times higher than in 1501–10. Rising prices, which continued down to about 1660, had far-reaching results. Many forms of economic activity were stimulated, but the general effects varied from class to class. Wage-earners and land-owners, whose incomes did not readily respond to changes of money value, felt the pinch. Many landed people got into the clutches of money-dealers, and much land passed into the hands of the new *bourgeoisie*, who could not fail to make money as prices rose. The merchant class benefited most from the price revolution, but capitalist enterprise in mining and manufacture shared in the proceeds. Complaints of profiteering were common. Both at home and abroad the State tried to check the worst abuses.

In England the Statute of Artificers, passed in 1563, was designed to "yield unto the hired person, both in time of plenty and in time of scarcity a convenient proportion of wages." Previous Statutes were repealed, because they had fixed maximum rates, now declared too small and "not answerable to the time respecting the advancement of prices of all things." Under the new law Justices of the Peace had authority to fix new maximum rates, and to review them each Easter, taking into account "the scarcity and plenty of the time." But the Justices were landowners whose main sympathies lay with the employers rather than with the wage-earners. In practice, the Act was often used to check the upward urge of wages. The real wages of masons, for instance, fell by half between 1500 and 1600. In short, the general economic effect of the rising prices was to stimulate trade and industry by increasing the margin between costs and selling prices. Those who suffered most were those whose incomes did not readily adjust themselves to the new standards. There is little doubt that the price revolution contributed to the rapid progress of capitalism in the sixteenth and seventeenth centuries. The fall in costs, however, as Nef points out, was possibly due as much to technological advances as to the fall in the purchasing power of money. Otherwise increasing disparity between wages and prices would have checked consumption and ultimately production itself.

INDUSTRIAL DEVELOPMENTS AND TECHNOLOGICAL ADVANCE

It is a mistake to imagine that the capitalist control of industry was unimportant until the industrial revolution. The domestic or putting-out system, which we have already discussed, was essentially capitalist, and it was the dominant system from Stuart days until 1800. In his book *The Rise of the British Coal Industry* (London, 1932), Professor Nef has shown that there was a remarkable growth of industry and a steady expansion of capitalism during the first half of this period at least.

"This industrial development," he says, "not only involved a remarkable growth in the output of many commodities, there were also technical improvements and changes in organization which, together with the evidence of a rapid growth, leads us to suggest very tentatively that the late sixteenth and seven-

* The rise would be still steeper if reckoned in the debased currency

teenth centuries may have been marked by an industrial revolution only less important than that which began towards the end of the eighteenth century" (i, 165).

. Meantime there was a surprising increase of large-scale production, especially in coal-mining, copper-mining, iron-smelting, metal-work, glass and shipbuilding. There was also rapid growth in the extent and complexity of the cotton industry during the period from the Dissolution of the Monasteries to the outbreak of the Civil War.

"The forces of rapid change then set in motion," says Professor Nef ("The Progress of Technology," *Econ. Hist. Rev*, October 1934, 4), "continue throughout the seventeenth and early eighteenth centuries, but it is not until the second half of the eighteenth century that the pace again becomes as fast as it had been during Shakespeare's lifetime"

The causes of this remarkable industrial expansion are complex. Some writers place the main emphasis on the price revolution following the importation of bullion from the New World. This view gained support from the valuable researches of Professor Earl J. Hamilton into price changes in Spain. Since wages seldom keep pace with rising prices, the price revolution increased profits by widening the margin between wages and selling-prices. In the view of Professor Hamilton, the large profits thus obtained over a long period stimulated capitalism. In his *Treatise on Money*, Lord Keynes gave this his support. Contrariwise, Professor Nef believes that too much emphasis has been placed on prices, and that the fall in costs was largely due to technological advances, to an increase in the scale of production, and to the discovery and use of new supplies of raw material such as calamine, alum, and especially coal There was in fact a fall in real costs, and it was a major factor in the situation.

One of the striking features of the hundred years that ended with the Civil War is the introduction of industries entirely new to England, or hitherto insignificant. Before the death of Elizabeth, mills for the production of paper and gunpowder, foundries for the production of cannon, sugar refineries, alum and copperas factories and saltpetre works had been established in England. All of them were of quite a different order from the usual sort of industries at this time. Unlike spinning and weaving or smith-work, which were not beyond the capacity of the ordinary craftsman, the new industries involved comparatively large outlays of capital for plant and equipment. Another type of enterprise established in the same period was the copper and brass industries. So large was the capital required, and so extensive their operations that they were conducted from the first by large joint stock companies. In 1568 the Mines Royal Company was incorporated to mine for precious metals in England and Wales. It opened copper mines in Cornwall and Cumberland, and established smelting-works in South Wales and Cumberland A German firm of Augsburg, an offshoot of the Fugger provincial house, subscribed half of the capital, and sent over smelters and various other experts (Fig. 25).

In 1569 the capital of the Mines Royal was £20,400, consisting of 24 shares of £850 each. Cecil, Elizabeth's principal Secretary of State, the Earl of

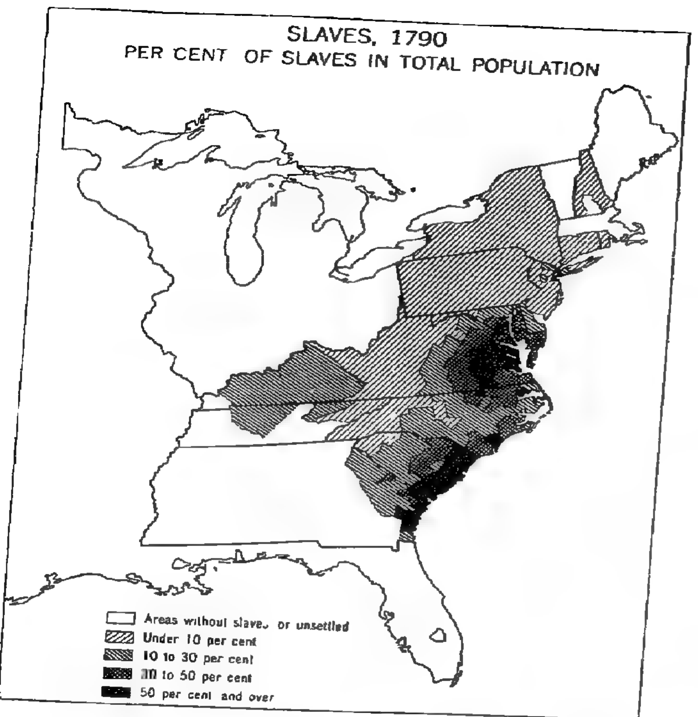


FIG. 32. LINEN MANUFACTURE

(*Knight's* Cyclopaedia of the Industry of All Nations, 1851.)

Because of its sticky nature flax is a more difficult fibre to handle than cotton, and application of machinery to its use therefore came later. Various preliminary processes such as *scutching* and *heckling* preceded spinning of flax, and it was particularly difficult to adapt these to power-driven machinery. This illustration, dated 1851, shows a large mill where all these processes are in full swing. As for other textiles, power-weaving came after power-spinning.

(See p. 181)



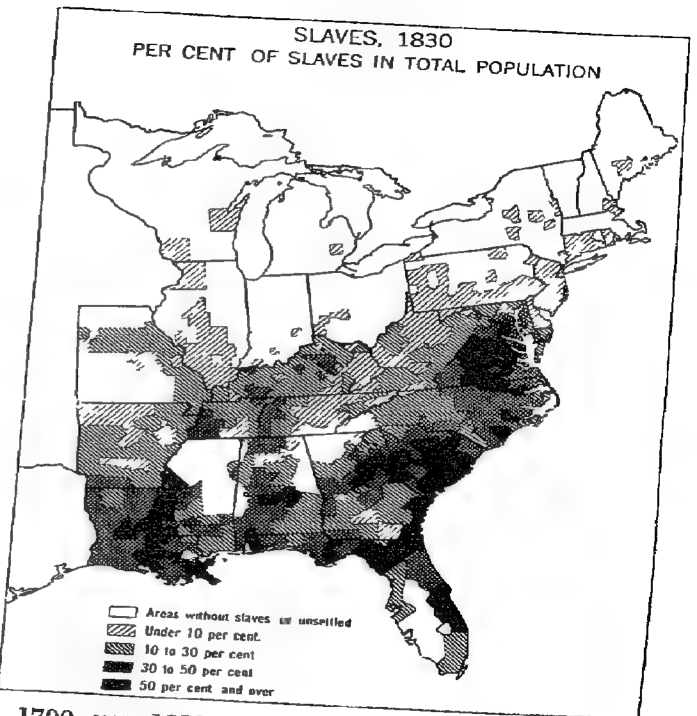


FIG. 33. SLAVES IN U S A, 1790 AND 1830

(*By permission From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

In 1790 the chief slave states were Virginia and Carolina In the next forty years there was a vast extension of cotton planting and with it of slave labour From the coast of Carolina the plantation system extended to the Mississippi and beyond it, until checked by mountain barriers Meanwhile, the employment of slaves in the North, where it was never extensive, diminished because industrialism required skilled labour.

(See p 195)





FIG. 34 COTTON SPINNING IN U S.A , 1810 AND 1840

(*By permission From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

These maps show the first phase of industrialism in the United States Starting in the north-east in Pennsylvania, cradle of American industrialism, industry spread westwards By 1840 there were many mills between the Alleghanies and the Mississippi, but the bulk of output came from mills in the north-east.

(See p 198)

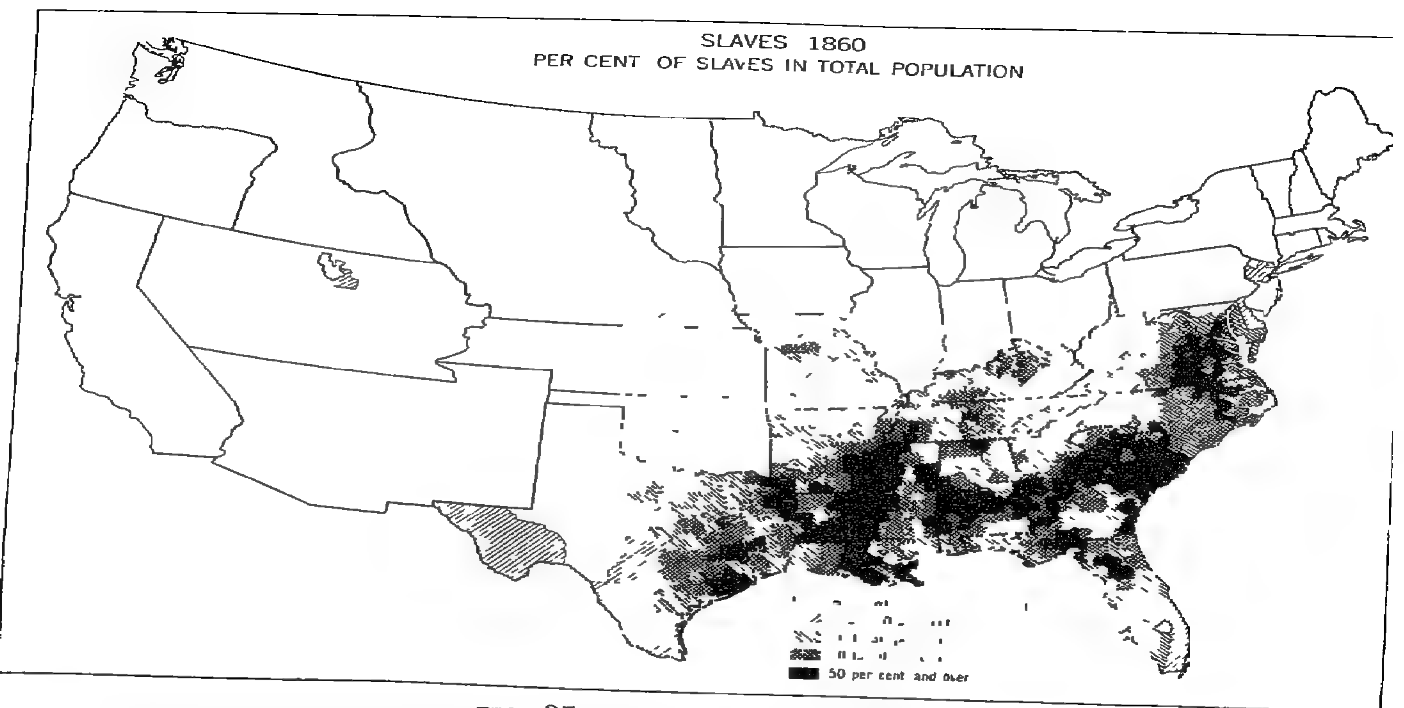


FIG 35 SLAVES IN U S A, 1860

(By permission From the Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

By 1860 the stage was set for the Civil War This map displays the background of the conflict The plantation system, extending westwards to its extreme limit, had filled the Mississippi valley and lands to the south of the Ohio North and east lay the region of industrialism where slave labour was practically non-existent The issue was which social system should control the Federal Government

(See p 201)

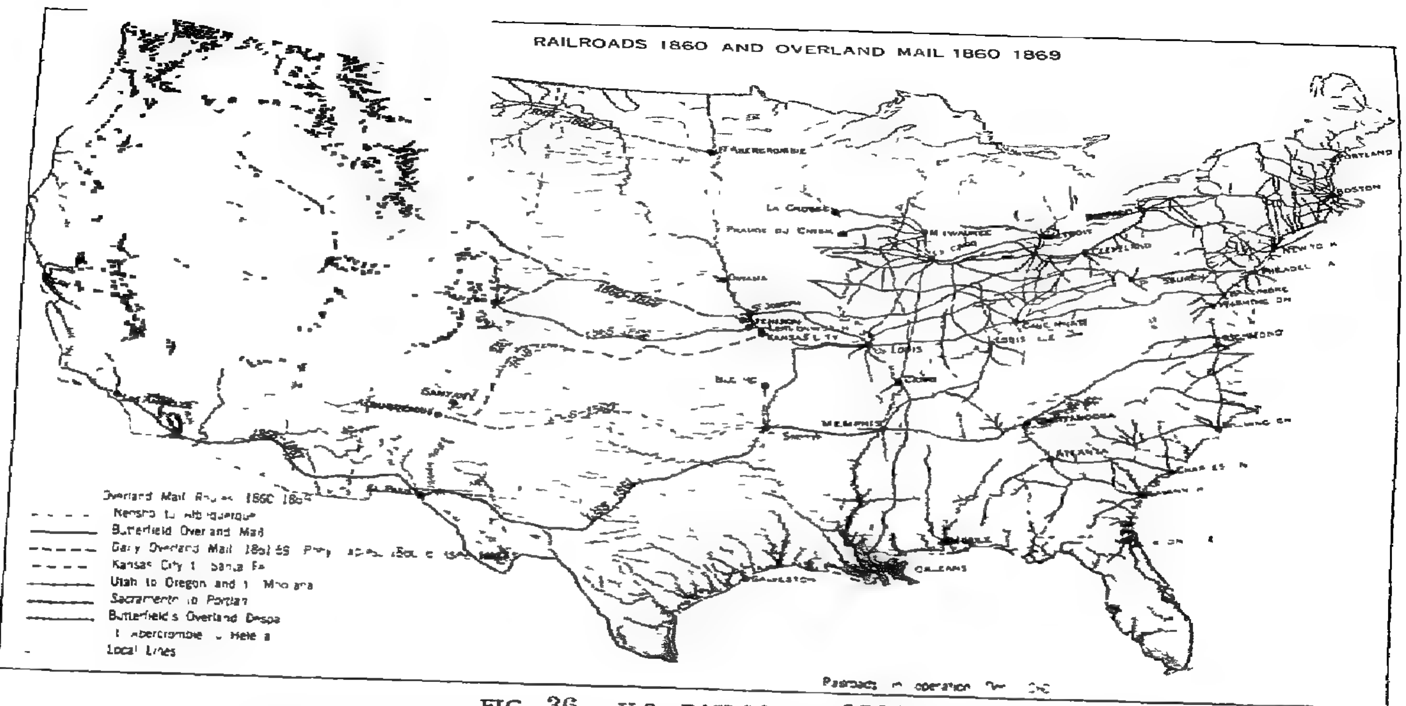


FIG 36 U S RAILROADS, 1860

(*By permission* *From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*

Compare this with Fig 34 Here we see the extension of industrial capitalism from the Atlantic seaboard to the Great Lakes Railway and telegraph played a dominant part, bringing industrial north-east and agricultural middle-west within the same economic system The old north and south lines of commerce, following coast and rivers, now took second place to traffic east and west

(See p 203)

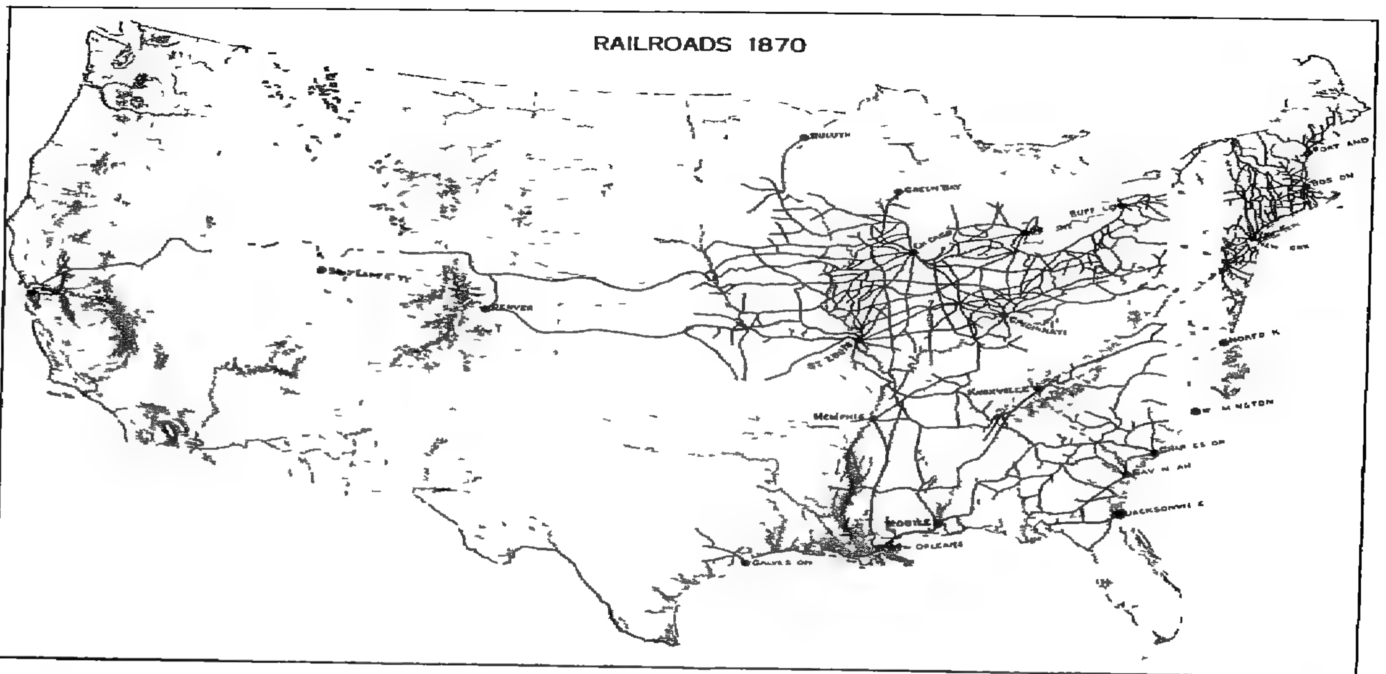


FIG. 37 U S RAILROADS, 1870

(*By permission From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

Compare this with the last text figure It will then indicate the vast progress of the northern states just before and after the Civil War The agricultural middle west is now firmly bound by the railway system to the industrial east The first trans-continental railway completed is strengthening the hold of the eastern states on middle west and Pacific coast Its completion is a landmark in the progress of American capitalism (See p 203)

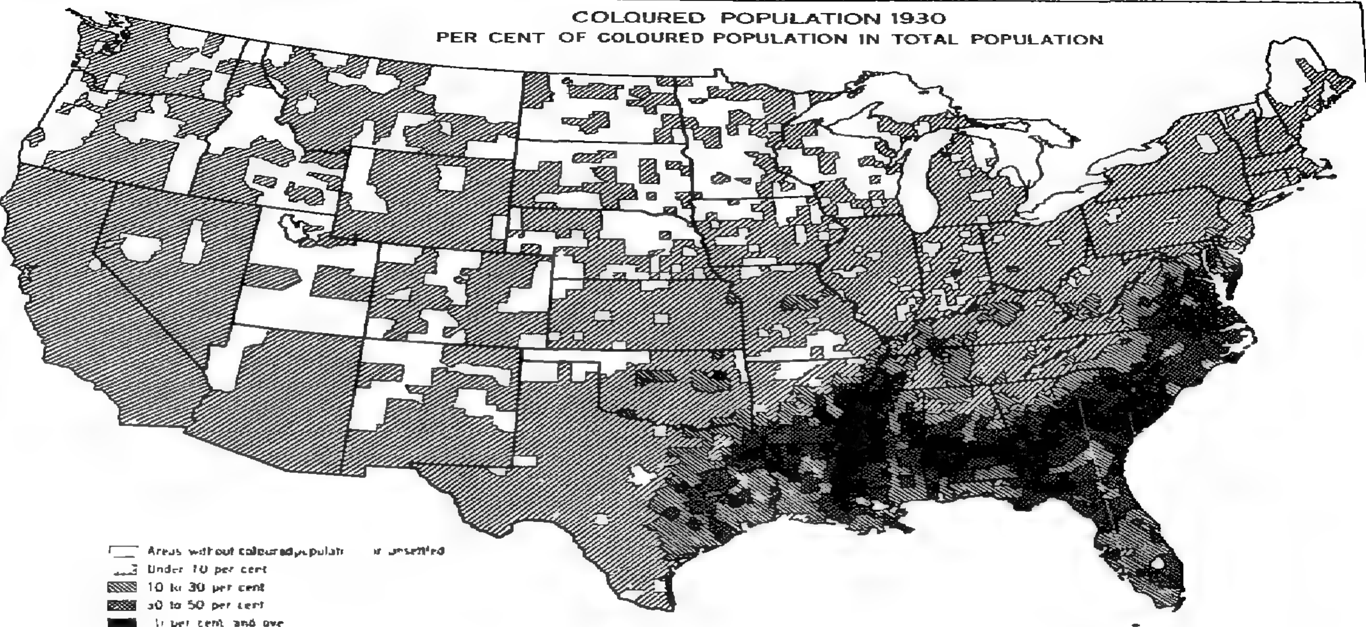


FIG 38 COLOURED POPULATION OF U S A, 1930

(*By permission From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

Slave labour left in its train a tremendous political and social problem Abolition of slavery in 1863 did not solve the problem of assimilation of freed black labour into the American body politic In the southern states, home of the plantation system, the proportion of coloured people is very high, while there are few districts elsewhere which do not have a sprinkling of them, mainly engaged on menial tasks.

(See p 210)

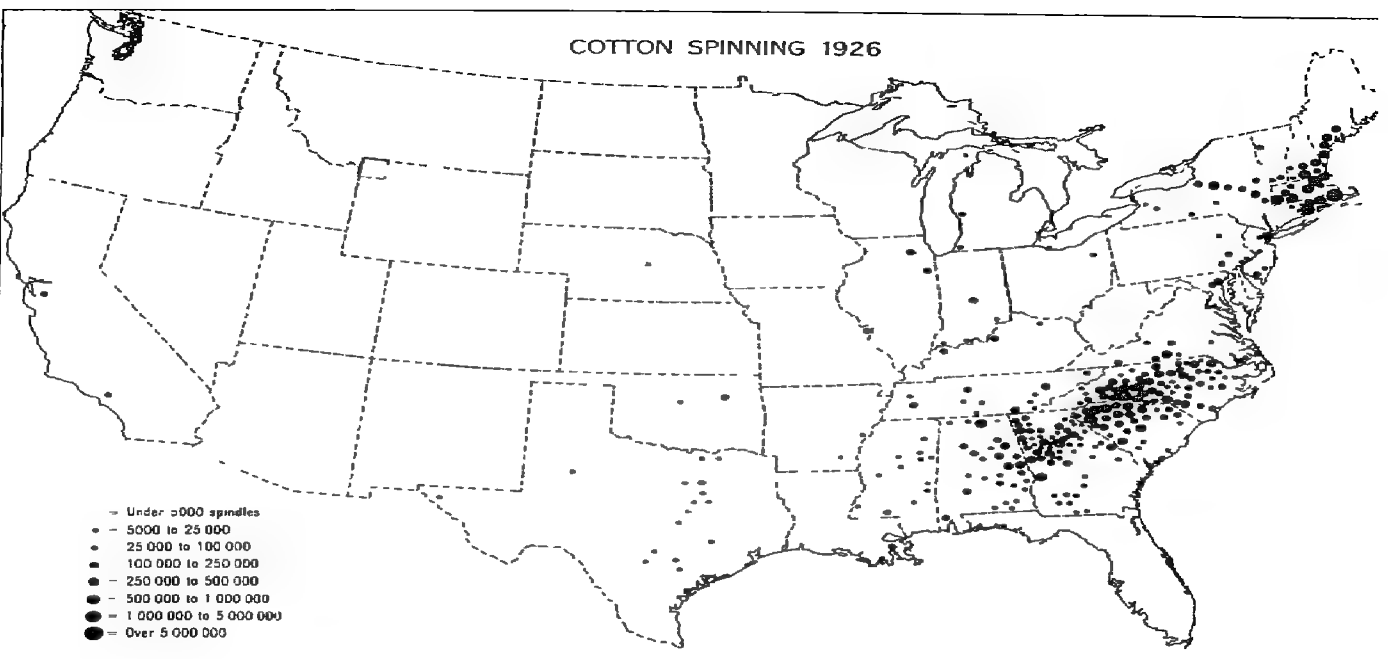


FIG 39 COTTON SPINNING IN THE SOUTH, 1926

(*By permission From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

After the Civil War, reconstruction of the south called for promotion of cotton manufacture close to sources of raw cotton Its progress is shown in this map The negro population, no longer slave, was thus brought within the factory system Such manufacture at the seat of raw materials had serious repercussions on British industry Hitherto secure in its seniority, British cotton manufacturers relied on raw materials imported from countries not as yet industrialized and on foreign markets for its finished products

(See p 210)

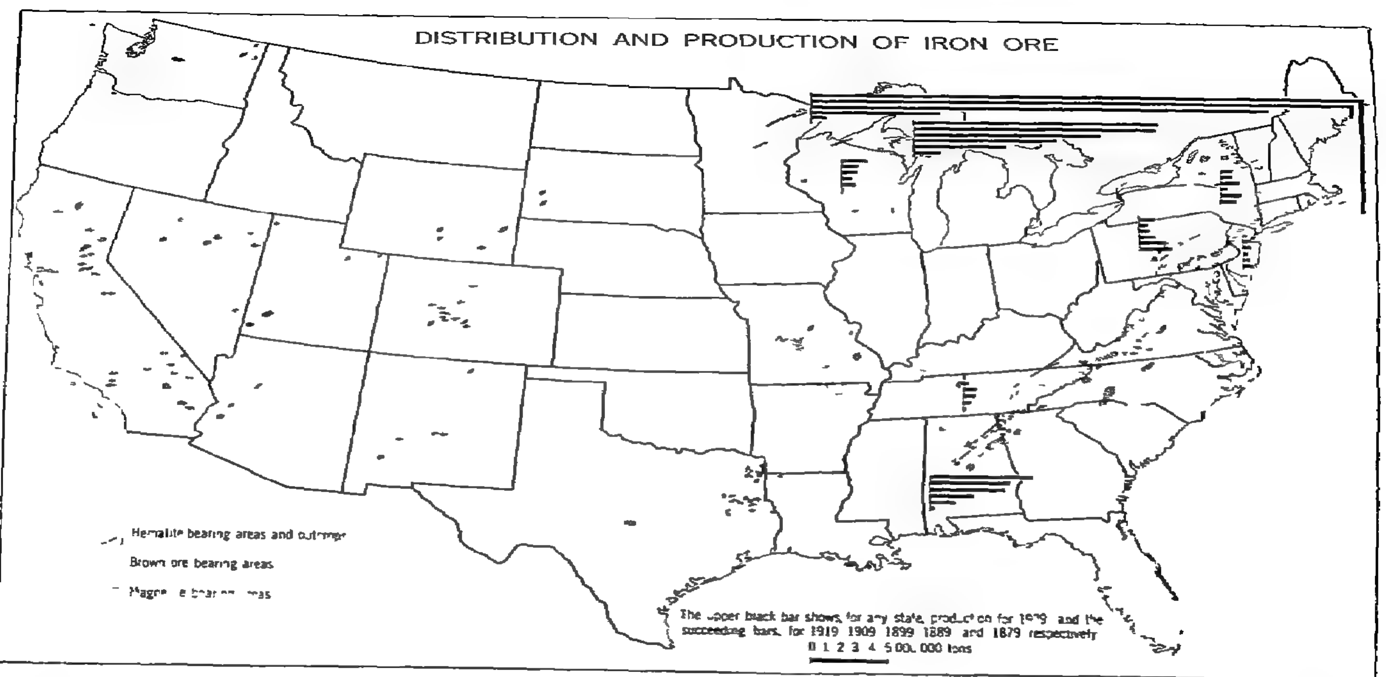


FIG 40 DISTRIBUTION AND PRODUCTION OF U S IRON ORE.

(*By permission From the* Atlas of the Historical Geography of the United States, *published jointly by the Carnegie Institution of Washington and the American Geographical Society of New York*)

The bulk of U S supplies of iron ore were initially obtained in Pennsylvania, where the iron and steel industries first took root Increased demands for raw material led to opening of resources on the shores of the Great Lakes, and raw material came by steamer and railroad to the Pittsburg area In 1908, for instance, the main centres of manufacture were still eastern Pennsylvania and the borders of Ohio.

(See p 213)



FIG 41 THE BANKER AND HIS WIFE.
(*Quintin Matsys*) (*The Louvre*)

This famous picture by Quintin Matsys, the Antwerp artist, depicts an early sixteenth century banker and his wife Coins were then the only form of money, and the art of coining was not very far advanced So the banker had to be continually on the alert for light-weight and counterfeit coins Here the banker with his wife are intently engaged on this task

(See p 219)

Leyden 22 January

On Sight heirof pay to Sir James Calder off
Gordone marchand in Rotterdame to the valua
Scottish money received by me, together with the
this for my first bill off exchange as witness of the

For Archibald Grant off Ballintome

FIG. 42 THE BILL OF EXCHANC

(By permission of Sir Francis Grant,

Notice the address—Leyden Francis Grant, whose bill thi
College, Aberdeen, and then went, like many Scots studer
University To get money from his father in Scotland, he d
the money to be paid to Sir James Calder for Mr James Gord
With this credit Gordon, who cashes the bill for Grant's benefi
(See p 221)



FIG 43 PROMISSORY NOTES
(*Bickham*, The Universal Penman, 1733)
The purpose of Bickham's book, from which this is taken, was to show the importance of writing for people engaged in commerce Seated at their desks are two merchants having instruction in the proper keeping of ledgers and drafting of trade documents, such as promissory notes
(See p 224)

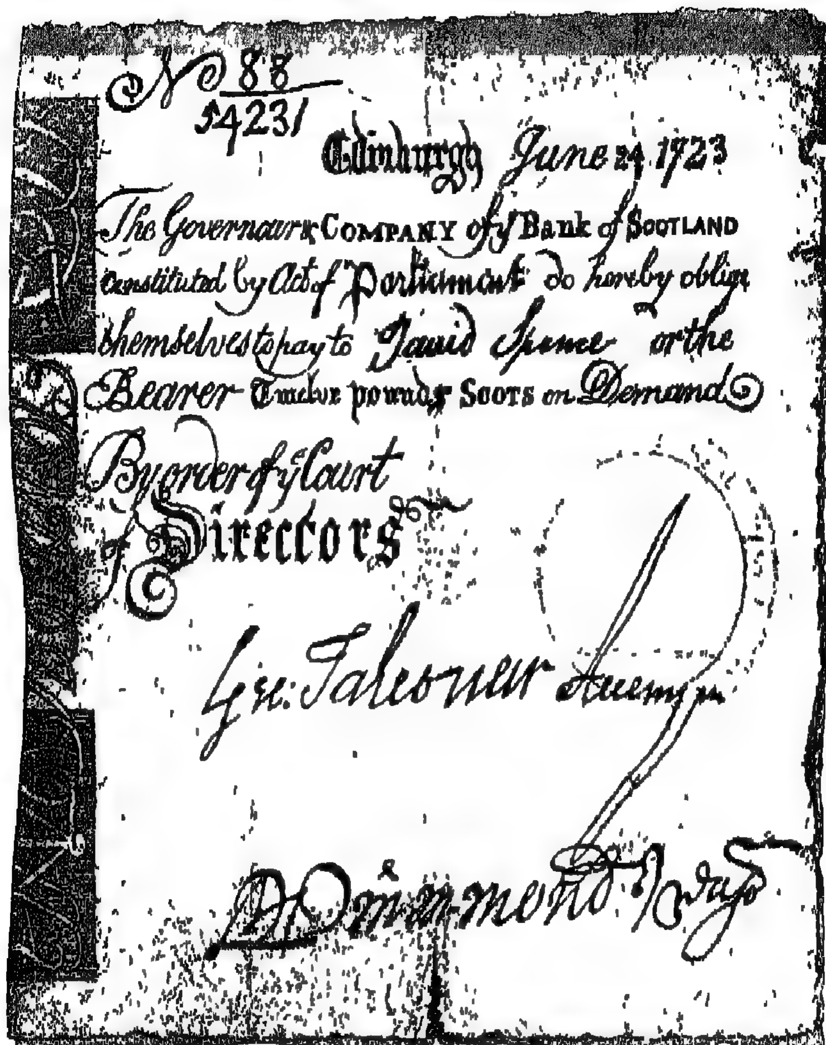

No 88
54231
Edinburgh June 24 1723
The Governour & Company of ye Bank of Scotland constituted by Act of Parliament do hereby oblige themselves to pay to David Spence or the Bearer Twelve pounds Scots on Demand
By order of ye Court of Directors

FIG 44 BANK OF SCOTLAND NOTE OF 1723

(By permission of the National Museum of Antiquities of Scotland)

The Bank of Scotland was established in 1695, the year after the Bank of England Both issued notes such as this one At first they were made out to individuals, like modern cheques, but with the difference that they were for round figures Since they were payable in cash on demand they were known as convertible notes The goodness of a note, of course, depended on the reserve of cash in the bank's coffers

(See p 225)

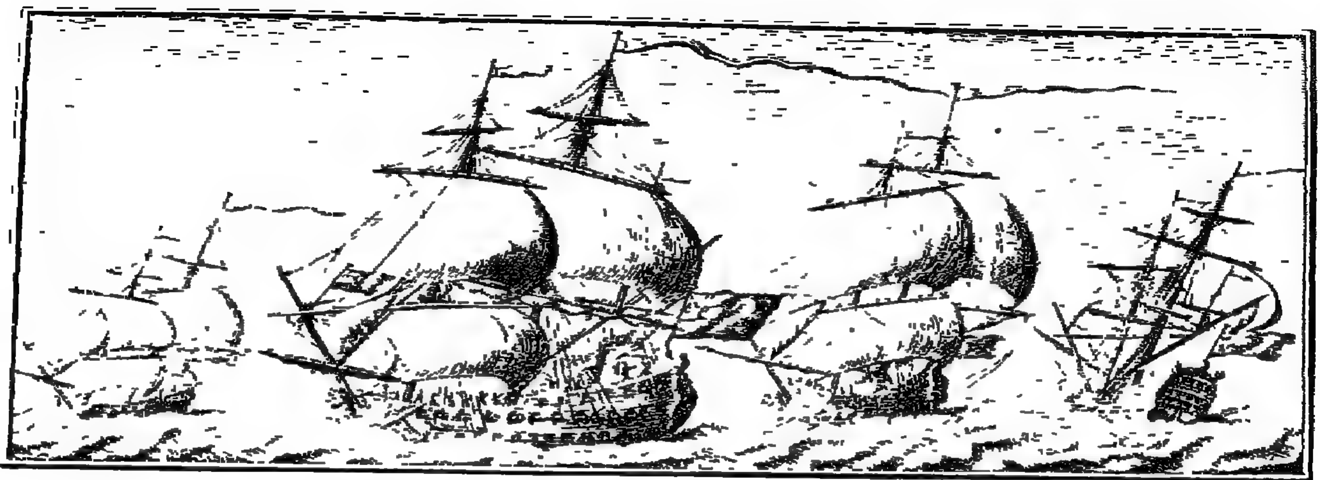


FIG 45 BANK OF ENGLAND, GREAT HALL

(*Rowlandson and Pugin,* The Microcosm of London, 1808–9, *by permission of the Trustees of the British Museum*)

This massive structure symbolized the power of the Bank of England The imposing appearance of the Great Hall was designed to give confidence to customers Tellers and other officials, complete with top hats, sit behind high grills, while the stream of customers comes and goes

(See p 227)



How to get Riches.

FIG 46 HOW TO GET RICHES

(*Bickham*, The Universal Penman, 1733)

In the early eighteenth century Britain s wealth rested on commerce, and Bickham had no doubts about it Shipping was a key activity On it depended the country's ability to engage in overseas commerce and hence to have at its disposal the new commodities suitable for the prosperous Englishman's table and wardrobe

(See p 230)

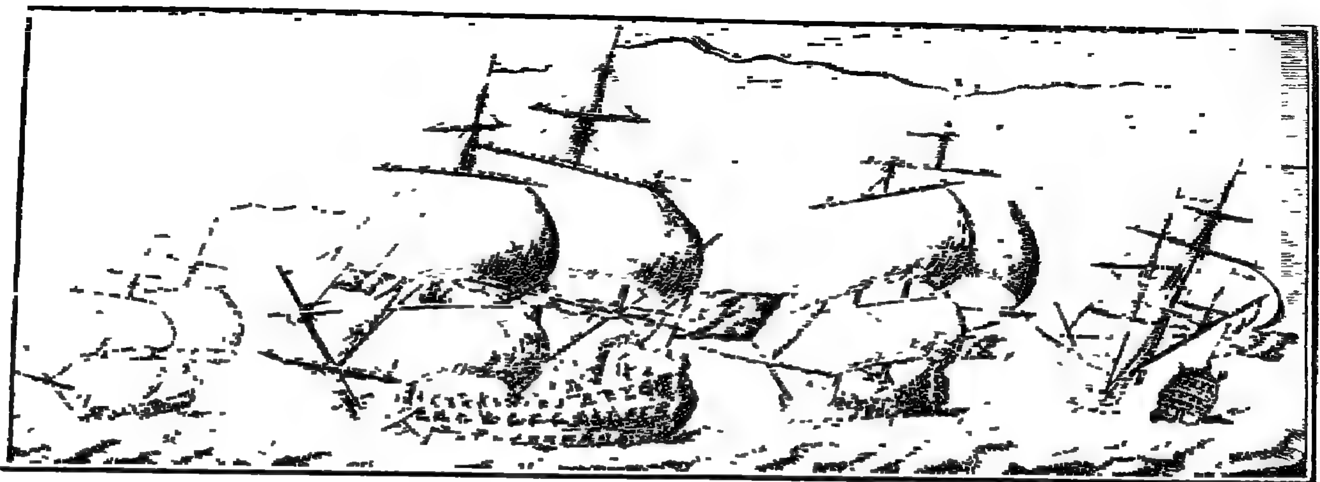


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(See p 239)

ENGLANDs

TREASURE

BY

Forraign Trade.

OR,

The Ballance of our Forraign Trade

IS

The Rule of our Treaſure.

Written by THOMAS MUN *of*
Lond. *Merchant*,
And now publiſhed for the Common good by his
Son JOHN MUN *of* Bearſted *in the County of* Kent, *Eſquire.*

LONDON,
Printed by *J. G* for *Thomas Clark*, and are to be ſold at his
Shop at the South entrance of the *Royal*
Exchange. 1664.

FIG. 47 ENGLAND'S TREASURE BY FORRAIGN TRADE, 1664.

This title page contains the motto of the eighteenth century mercantilists, still sometimes trumpeted in our own time Thomas Mun, member of the East India Company, was himself a great London merchant His argument amounts to this The extent of foreign trade is the infallible index of national prosperity If exports exceed imports, the balance will be paid in bullion, and a country with a good store of bullion is a strong country If the reverse occurs, ruin is inevitable.

(See p 241)

Pembroke, and the Earl of Leicester, were shareholders. The Queen herself showed a lively interest in its proceedings. From the beginning, this industry was run on what one might term factory lines, with large numbers of wage-earners employed at the mines and the smelting-works. A complementary concern, founded on the same lines, was the Mineral and Battery Society. Chartered in 1568, it undertook to find calamine (an ore of zinc), hitherto unknown in England, to make brass (a combination of copper and zinc), and to introduce the processes of wire manufacture and battery. The latter involved the employment of many water-power driven hammers, some of them weighing 500 lb. These two companies ultimately amalgamated. Until the end of the seventeenth century, they controlled the mining of copper, the production of copper and brass, and the manufacture of wire and battery goods.*

LARGE-SCALE ENTERPRISE

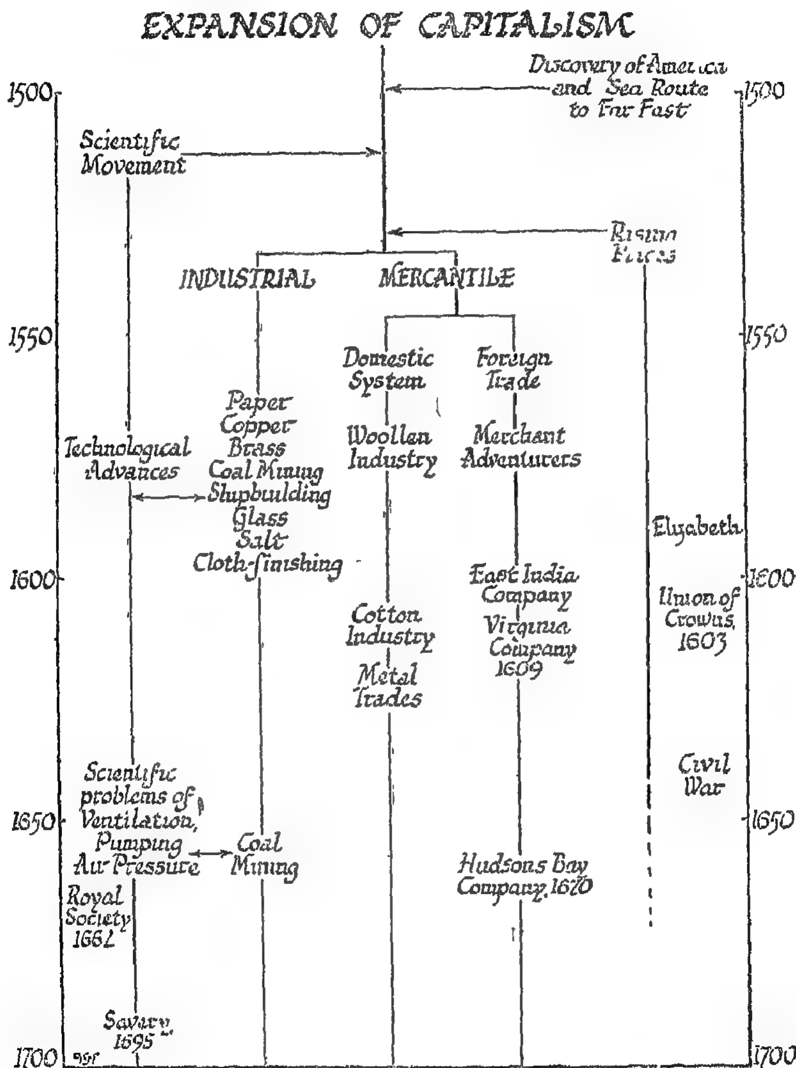
Technological advances were not confined to these industries. "A far greater number of work-people and a far larger amount of capital," says Nef, "were drawn into large-scale enterprise by the extensive changes in old industries than by the introduction of these 'new' manufactures." The increased demand for coal resulting from acute wood shortage directed attention to improvements in technique. Before this time, coal had been mainly dug from the outcrops; and mining concerns, whether of coal or tin, had usually consisted of small partnerships of working miners. Increased demand for coal made it necessary to sink shafts to depths of twenty and sometimes forty or fifty fathoms. This in turn called for use of machinery for pumping water, raising the mineral to the surface, and providing for ventilation. Capital was necessary for all this. So the mining industry soon became highly capitalized. Between the accession of Elizabeth and the Civil War, thousands of pounds went into mining, especially into coal-mining, in England and Scotland. Some mining concerns were now large companies employing scores and sometimes hundreds of miners. Before the middle of the sixteenth century, the annual output of a mine had seldom exceeded a few hundred tons. By 1640, in the north and midlands of England, and along the shores of the Forth in Scotland, there were collieries producing 10,000 and 25,000 tons of coal.

In some industries less vitally affected by technological advances, the same tendency towards large-scale production was also in evidence. Distillation of salt from sea-water, for instance, had long been associated with the coal industry, but the scale of the enterprises was small, and there was considerable dispersion of the industry. Growth of population and increasing uses of salt gave it a stimulus to expansion, encouraging concentration at a few favoured spots, such as the mouths of the Tyne and Wear, and the Firths of Forth and Clyde. Small-scale production, Nef tells us, gave place to plant involving expenditure of hundreds of pounds. As early as 1589, one was established on the Wear which claimed to employ three hundred men,

* See H. Hamilton, *English Brass and Copper Industries to 1800*, London, 1926.

and to have a capital investment of £4,000. In soap-boiling, too, the tendency was to production on a large scale, and to a lesser extent in lime-burning and brewing.

In two other important industries, large-scale capitalist conditions ob-



TIME CHART 9. EXPANSION OF CAPITALISM

tained. Shipbuilding had for centuries involved large capital outlays. The employment of wage-earners expanded under the stimulus of international rivalry and the development of overseas and coasting trade. Even in the textile trade, despite its predominantly domestic character, industrial capitalism was common in the finishing processes such as fulling, dyeing, and

bleaching. Before the Restoration, coal was extensively used for these. There was, therefore, a very large increase of capitalist production in the late sixteenth and seventeenth centuries, and factory conditions were much more common than we used to suppose. The forces of industrial change were in full flood—expanding population and trade, technological advances and the use of coal.

THE PASSING OF THE AGE OF WOOD

The nineteenth century is often called the age of coal. The centuries before 1750 may aptly be named the age of wood. For houses, tools, potash, ships, iron-smelting, and for many other uses, wood and wood charcoal was in constant demand. When Elizabeth came to the throne the shortage of timber was becoming serious. Its price rose sharply, and far exceeded the general rise. Commission after commission inquired into the subject, and all reported on serious deforestation in every county. In Scotland the situation was just as acute. In 1621 it was reported that many people had

"bene constrayned not onlie to cutt doun and distroy thair policie and planting, bot thair movable tymmer worke, to mak fyre of it . . . and in mony placeis the trade of brewing and baiking for want of fyre is neglectit and cassen up" (Nef, i, 159).

All the evidence goes to show that before the Union of 1603 a serious wood famine existed in England, Wales and Scotland. On the Continent there were also signs of scarcity, though the real crisis appeared in Britain first of all. The scarcity of timber in Britain was due to an expanding population whose demands for wood were many and varied. The most serious effects of the wood famine were experienced by the iron industry. By the end of Elizabeth's reign it was checking progress. By the Civil War the production of iron had been brought to a standstill All sections of the metallurgical industries were not equally affected. The situation was most acute in smelting and forging which employed wood fuel. In the finishing processes, such as slitting and rolling-mills, or in smith's work, coal was used. All the efforts of iron-masters were directed to the problem of how to use coal in the furnaces and forges. Success did not come until the second half of the eighteenth century. The significance of the wood famine depends especially on the fact that Britain was forced to work her coal resources earlier than other countries. The success she achieved goes far to explain her economic superiority among the nations of the world on the eve of the industrial revolution.

CAPITALISM IN THE COTTON INDUSTRY

In the Lancashire cotton industry, as Wadsworth tells us, economic changes in Elizabethan and early Stuart times were scarcely less important than between 1760 and 1832, when the factory system of spinning so rapidly established itself. In his account of seventeenth-century capitalism he writes:*

* Wadsworth and Mann, *The Cotton Industry and Industrial Lancashire*, 29.

"Like the trading oligarchy of a mediaeval town, the clothiers, mercers, and linen drapers of Manchester formed a substantial *bourgeoisie*, whose members filled in rotation the offices of the manorial borough, and were closely connected by ties of marriage, apprenticeship, and partnership."

George Chetham is typical of the capitalists of the time. In 1610 he invested £320 in his master's business, which was concerned with "the buyinge and sellinge of Lynnen clothe commonlie called Stopport (Stockport) clothe . . . the buyinge and sellinge of Cotton Wooll or Cotton Yarne and . . . the buyinge and sellinge of Woollen Clothe commonlie called Frizes, Whites, Ruggs and Bayes." A few years later he joined with his younger brother in carrying on the same sort of business. He purchased cotton in London, and had it sent by carrier to Manchester. Some was sold retail in small lots; but most was advanced on three or six months' credit to fustian-makers and weavers in the country. In theory the weavers were independent, but in practice they had to depend for their raw materials on Chetham, who financed them. As his wealth increased, he employed his surplus capital for the purchase of land, and in credit transactions. Chetham and his kind, who generally called themselves clothiers and drapers, were in effect large capitalist middlemen. They bought raw cotton and marketed the finished product. So the weavers were wholly dependent on their services.

"The cotton and fustian dealer," says Wadsworth, "stood in a peculiarly strong position towards the producer to whom he gave credit for his purchase of raw material and whose goods he bought. Through these credit bonds the economic dependence of the producer on the middleman was close, and was intensified as the volume of trade grew. By the last twenty years of the seventeenth century . . . the putting-out system was in full vigour" (36).

From being distributors of raw materials, purveyors of credit, and buyers of finished goods, the dealers in course of time came to control production as well. At the end of the seventeenth century the putting-out system was widespread. The draper or clothier employed spinners and weavers in their homes, and he often employed direct wage-labour in the finishing processes, such as calendering and dyeing, which required capital equipment. The rapid progress of industrialism, which Professor Nef has done so much to elucidate, slowed down about 1640. One major reason for this was the Civil War, which brought great disturbance to economic life and very seriously interfered with marketing. The rise of prices slackened, and by 1660 had spent its force. Then came the Anglo-Dutch War, the Great Plague, and the Great Fire, which completely disorganized the economic life of the metropolis. From the Restoration period until about 1750, the progress of capitalism was slower than it had been in the previous hundred years. There was a fresh spurt just before 1700 in both Scotland and England. In Scotland it came to an end in the ill-starred Darien Scheme, and in England in the speculative crash of 1720. Though the pace of economic change was slower, there was still considerable progress, especially in the metal industries, in coal-mining, and in the Lancashire cotton industry.

THE EVE OF THE INDUSTRIAL REVOLUTION

Just before the beginning of the second phase of capitalism in Britain, industrial organization presents a picture of immense variety, but the prevailing pattern is the same. Over the greater part of industry capitalism had established itself, either in the domestic form or as the factory system. In the textiles, especially in spinning and weaving, the domestic system was the rule. For instance, a witness before a Parliamentary Committee in 1713 declared that he and his son hired five or six thousand persons in Middlesex, Berkshire and Worcestershire for making sail cloth "when in full work." In the cotton industry it was the common practice for merchants of Manchester to employ large numbers of weavers in and around the town. They had agents called "putters-out" who provided the weavers with material and took back the finished webs. In the woollen industry of the eastern counties as well as in the west country, this system was general. It was also common in the linen industry of Scotland. John Forrester, manufacturer at Stirling (1742–9), purchased flax and employed spinners and weavers over a wide area. He had a warehouse in Glasgow, and exported his finished cloths to the Plantations Another "manufacturer," Duncan Grant of Forres, carried on the linen industry from the Great Glen to Aberdeenshire. He purchased flax both at home and abroad, gave it out to be spun, through his agents, called "in-takers," who lived in the various villages over this wide area, and took back the yarn, which he sent to manufacturers in Aberdeen and Glasgow.

At the time of Defoe's Tour, in the woollen industry of the West Riding the typical figure was the independent handicraftsman The movement of the times, however, was towards the spread of the domestic system, already well established in the worsted industry. The final processes generally involved large amounts of capital and this, of course, meant conditions approximating to factory production. The owner of linen bleachfields (Fig. 26) or dye-works not only had large capital employed in land and plant, but employed people on the spot as well as many domestic weavers who supplied the cloth for weaving. For instance, Sandeman, a well-known bleacher in Perth, had extensive bleachfields where he employed wage-earners. He also had agents as far north as Inverness and Cromarty. They in turn employed domestic workers in spinning and weaving, thus providing cloth for the bleachfields. Even within the domestic section of the textile industries, however, the forces making for industrialism and the factory system were already in full vigour. The Dutch loom for the manufacture of ribbon and small wares, invented towards the end of the sixteenth century, was in common use in England before 1700. It was expensive, so beyond the pocket of the ordinary weaver. The man with capital could invest in several such looms, house them together, and employ workpeople under his direct supervision. In silk-throwing there was an embryo factory system soon after the establishment of Loombe's famous Derby factory in 1721. This represented an investment of £30,000 and gave employment to three hundred hands (Wadsworth and Mann, 105, 304)

Long before the industrial revolution, capitalist production was thoroughly established in the metal industries and in coal-mining. The growth of the

market in populous towns, at great distances from mining districts, led to the investment of large amounts of capital in the coal trade, while in the actual mining large outlays were the rule. The growth of company organization provided opportunities for control of industry by a few powerful financiers. This was specially true of coal-mining, copper-smelting, brass manufacture and iron-smelting. Moreover, all the modern devices of integration, amalgamation and combination were common in the early eighteenth century. The copper-smelters of South Wales were referred to as "the confederated buyers" or "associated smelters" as early as 1730. In the seventeenth century the coal industry of the Tyne district was organized in partnerships which regulated production, and so constituted an anticipation of the modern cartel. Before 1750 capitalism was thus advancing at every point. The ground was prepared for its final phase, modern industrialism and factory labour.

CHAPTER VII

TRIUMPH OF INDUSTRIALISM

"What is the use of your spun shirts? They hang there by the million unsaleable." (CARLYLE)

WE live to-day in an age of steel, electricity, light metals, oil, plastics, aviation, a world of large-scale production, big combines, and technological advances. The citizen anxious to form sound judgments on social questions surveys a bewildering scene of petty economies in government and wholesale waste in industry, of vast unemployment, and of gigantic opportunities for constructive human effort. We grow up with knowledge of the increasing power of industry to produce goods for the satisfaction of human needs. We no longer take the *status quo* for granted. We expect something better for our children and for our old age. According to our lot in life as workers by hand or brain, we are outraged by maladjustments of distribution or tardy application of the newest knowledge. Prospecting the possibilities from different directions, not always with reciprocal sympathy for our several sources of dissatisfaction, trade unionists, technicians and administrators become intolerant of the functionless shareholder and those who manipulate the money-machine without regard to the needs and inclinations of the mass of mankind. Such uneasiness and such expectation is a new feature of human life. For countless millennia men and women have lived and died without questioning the permanence of the state of life into which they were born. If they have revolted against temporary grievances, they have done so with the hope of restoring supposedly better conditions enjoyed by their forefathers. Two centuries ago, no vistas of collective human achievement stretched into the future in the consciousness of ordinary men and women. In this chapter and the next few we shall try to understand the immediate background of this change.

In the last chapter we traced the story of capitalism to the eve of the industrial revolution. This was no arbitrary resting-place. Though dates have little significance for social history, the middle of the eighteenth century definitely marks the beginning of a new period of rapid economic and social change. Contrasted with what came before, the century between 1750 and 1850 has characteristic features which justify a label. We call it the *industrial revolution.* We now know that capitalism was well established in Britain before this time It was largely a mercantile type, but we have seen that industrial capitalism had emerged in the metal industries, in mining, and in several other types of enterprise. In view of these facts some economic historians have gone so far as to say that we should cease to speak of the industrial revolution, but this is a little pedantic By long usage the term has come to mean a sufficiently definite stage of social evolution.*

What, then, are the main characteristics of this period? One is greatly increased employment of power-driven machinery and therewith the spread

* On this see H L. Beales, *The Industrial Revolution,* 1928

of the factory system. In the previous stage of capitalism, it was common for the domestic worker to own the tools he used. With the employment of costly machinery, this is no longer possible The capitalist provides machinery and employs workers on his own premises under his own direction. The factory takes the place of the workshop. This goes with a second characteristic of the period, industrial concentration and urbanization.

Water was the first source of power used to drive machinery in the mills While the pull of the commercial centres like Manchester or Glasgow tended to draw the mills to one place, much dispersion was still inevitable, because they had to be built in river valleys, and the fall of water at any point prevented concentration. The employment of the rotary steam-engine, slowly coming into use before 1800 and swiftly afterwards, eliminated the forces making for dispersion. Factories crowded into the towns where coal supplies and abundant labour were readily obtainable. Coal was not only a source of power, it was also fuel for the iron industry and for the household. Small wonder that the coalfields exerted a tremendous attraction. The Black Country, south Lancashire, the North-East, and Lanarkshire bear witness to devastating effects of the supremacy of coal Urbanization proceeded at a reckless pace, storing up social problems that still await solution. The following figures of population tell their own story:

	1801	1831	1851
Manchester–Salford	95,000	238,000	401,000
Birmingham	71,000	144,000	233,000
Leeds	53,000	123,000	172,000
Sheffield	46,000	92,000	135,000
Bradford	13,000	44,000	104,000
Oldham	22,000	51,000	72,000
Bolton	18,000	42,000	61,000
Halifax	12,000	22,000	34,000
Glasgow	84,000	202,000	329,000
Paisley	17,000	31,000	48,000
Dundee	26,000	45,000	79,000
Aberdeen	18,000	58,000	72,000
Greenock	17,000	28,000	37,000

The countryside poured its people into the nearest industrial town. While doubtless there was some long-distance migration, as from the north to London or from the Highlands to Glasgow, in the main* the movement was mostly short-distance The towns of Lancashire drew recruits from Lancashire and Cheshire; those of Lanarkshire drew on the country around them and on the adjacent counties. Thus the towns were filled with rural people, unaccustomed to congestion and routine of urban life Tremendous social problems were thus created, problems of town government, of health and sanitation, of education, of over-crowding, and of slums.

* *Labour Migration in England*, by A. Redford; *Scotland's Shifting Population*, by D. F Macdonald.

Habit and tradition made it difficult for these country folk to adapt themselves to town life, especially to factory employment. The nature of factory life, the discipline, the strain of machine production, were hard enough for town dwellers. For country people they were almost unbearable Hammond tells of a cotton mill near Manchester, where the spinners who worked in 1823, at a temperature of 80–4 degrees, were subject to the following penalties:*

	s.	d.
Any spinner found with his window open	1	0
Any spinner found dirty at his work	1	0
Any spinner found washing himself	1	0
Any spinner leaving his oil can out of its place	1	0
Any spinner repairing his drum banding with his gas lighted	2	0
Any spinner putting his gas out too soon	1	0
Any spinner slipping with his gas lighted	2	0
Any spinner spinning with gaslight too long in the morning	2	0
Any spinner having his lights too large for each light	1	0
Any spinner heard whistling	1	0
Any spinner being five minutes after last bell rings	1	0
Any spinner being sick and cannot find another spinner to give satisfaction, must pay for steam per day	6	0

In this factory, said the employees, "they work fourteen hours per day, including the nominal hour for dinner; the door is locked in working hours, except half an hour at tea-time, the workpeople are not allowed to send for water to drink, in the hot factory, and even the rain water is locked up, by the master's order, otherwise they would be happy to drink even that."

Hours were just as long under the domestic system. Indeed, the regularity of the factory day was an advantage; but it had a harshness and rigidity which the workers hated. As a writer put it in 1832,

"whilst the engine runs the people must work—men women and children are yoked together with iron and steam. The animal machine—breakable in the best case, subject to a thousand sources of suffering—is chained fast to the iron machine, which knows no suffering and no weariness" (quoted Hammond, 21).

CAUSES OF THE INDUSTRIAL REVOLUTION

The fact that the industrial revolution occurred first of all in Britain has a very significant bearing on the present economic position of this country. It is therefore important to be clear about why Britain led the way in industrialism. It was not due to the operation of any one circumstance. Expansion of commerce stimulated, and itself was stimulated by, industrial developments; but this was not peculiar to Britain. A swift increase in population was the common experience of all European countries; yet Britain alone at the close of the eighteenth century commenced her industrial revolution Nor can we say that inventions were the primary cause, for many of them were the result of changes in technique, and important discoveries were the outcome of scientific and technological advances extending over the previous century.

* *The Town Labourer*, 1920, 19.

A conjunction of various circumstances favourable to change gave Britain the start. Alone among the nations of the world she possessed overseas markets and an expanding commerce, a growing population with a rising standard of living, a scientific movement, political stability, a certain measure of isolation from the political turmoil of Europe, relative freedom from medieval restrictions and internal customs barriers, and, very important, abundant coal resources which were already well developed in the eighteenth century. In no other country were all these circumstances present at the same time. The United States and Germany had to wait until the late nineteenth century, and Japan until the twentieth, before conditions were ripe for the second phase of capitalism At the present moment we hear the first rumblings of the industrial revolution in India and China.

THE AGE OF INVENTION

Widespread interest in invention and technology in the eighteenth century was partly due to the spirit of inquiry and experiment which we can trace back to the Great Navigations and partly to the needs of an expanding population with a rising standard of living which made urgent the production of more food and manufactured goods. The specific problems of food supply, of power, of coal mining, of cloth manufacture, of bleaching, and a host of others provided the subjects for scientific and industrial research. They canalized a growing interest in scientific inquiry. They gave it a purpose and incentive to greater endeavour. Science flourishes when there is widespread consciousness of the problems to be solved, and a cultural environment which encourages inquiry and research. The nature of the scientific advances made in the eighteenth century is a reflection of the great social problems of the time, and the cultural environment established by the preceding revolutions was propitious From the point of view of landlord, farmer and industrialist, it was a paying proposition to introduce improvements and to encourage invention.

Widespread interest in invention was characteristic of the time. While Arkwright, Crompton, Watt, and other well-known figures were engaged in their own tasks, there were literally thousands of others working with equal ardour to solve the same or similar problems There were many local and national societies organized for stimulating and rewarding invention, such as the Society of Arts in 1754, with prominent inventors and business people such as Arkwright, Boulton and Wedgwood among its members. The last two were prominent in the Lunar Society of Birmingham, and their names appear on the list of original fellows of the Royal Society of Edinburgh. James Watt, Junior, was prominent in the Philosophical Society of Manchester. Meanwhile contemporary newspapers and periodicals were full of accounts of invention. There were technical journals, encyclopædias, and dictionaries of arts and sciences. The patent records tell the more practical side of the story. The number of inventions registered between 1760 and 1789 was vastly greater than in the preceding century and a half (Bowden, *Industrial Society in England*, 1926, 12).

1700–09	22 patents	1750–59	92 patents
1710–19	38 ,,	1760–69	205 ,,
1720–29	89 ,,	1770–79	294 ,,
1730–39	56 ,,	1780–89	477 ,,
1740–49	82 ,,		

The prominence usually given to such men as Watt, Darby, Arkwright, and Crompton makes for a misleading interpretation of social development, and in particular of the whole movement of technology.* Discoveries of the eighteenth century were particular applications of scientific knowledge accumulated over the previous two centuries by direct association of science with practical problems. Development of coal-mining focused attention on problems of pumping and ventilation, resulting in discoveries about air, about pressure—in fact, they prepared the way for the invention of the steam engine. The story of Watt and the kettle is not only mythical but fantastically wrong-headed as a view about the way in which invention advances. The separate condenser did not come like a bolt from the blue. It was the straightforward outcome of knowledge accumulated since the days of Boyle, and pressure of the urgent practical problem of economizing heat.

So also Darby's discovery of how to use coal to smelt iron was the culmination of a long series of experiments necessitated by the scarcity of wood, and Murdock's first practical use of coal gas in 1792 was based on knowledge painfully and dangerously acquired in the process of mining since the days of Queen Elizabeth. Great advances in chemistry, stimulated by the problems of coal-mining, of agriculture, of warfare, of metallurgy and of bleaching, were likewise the outcome of experiments stretching back to the early days of the Royal Society. For instance, the military use of gunpowder necessitated supplies of saltpetre, and how to secure adequate supplies was a major practical problem in the days of Elizabeth and the Stuarts. Scouring of stables and manure dumps for saltpetre, the common method of getting it before the East India Company began to ship large supplies to England, directed attention to the importance of nitrates in cultivation. Glauber's discovery that saltpetre can be used as a fertilizer was a happy combination of peaceful agricultural practice and the lethal demands of the munitions industry. Research into the food of plants and the study of the natural history of salts got a new stimulus. When it became profitable to apply the new agricultural knowledge, as it did especially from about 1750 onwards, farming was revolutionized, and further inquiries into the science of agriculture followed (Hogben, 406). The revolution in bleaching associated with the manufacture of sulphuric acid and chlorine was also the outcome of industrial inquiry and experiment connected with metal alloys, pottery, farming, as well as with bleaching itself

The second half of the eighteenth century cannot therefore be regarded as an island in time. Its debt to the previous two centuries is eloquent testimony to what scientific progress owes to the stimulus and direction of social needs. The great industrialists were not only anxious to use the fruits

* See *Science for the Citizen*

of discovery, they played a very active part in encouragement of research. Wedgwood's interest in chemistry, geology and thermometry arose from his pottery work, which involved the analysis of different sorts of clay, and the production of a variety of colours for his finished products. In a letter of 1767, quoted by Hogben, Wedgwood writes:

"I am going on with my experiments upon various earths . . . many of my experiments turn out to my wishes and convince me more and more of the extensive capability of our manufactures for further improvement . . . such a revolution is at hand and you must assist in and profit by it."

Wedgwood himself became a Fellow of the Royal Society, carried on correspondence with Priestley, and along with Boulton assisted Priestley financially in carrying out his experiments. The famous Lunar Society of Birmingham was a meeting-place of industrialists and scientific workers. "I dined yesterday at the Lunar Society (Keir's House)," wrote Boulton to Watt, "there was Blair, Priestley, Withering, Galton, and an American 'rebel,' Mr Collins. Nothing new except that some of my white Spathos Iron ore was found to contain more air than any ore Priestley had ever tried, and, what is singular, it contains no common air, but is part fixable and part inflammable" (quoted Hogben, 430). In the same circle of friends and partners, Dr. Roebuck, less well known but not less outstanding among the inventors of the period, was more particularly interested in the chemistry of metals He founded sulphuric acid works in Birmingham and Prestonpans, was a partner in founding the Carron Iron Works, leased coal-mines in Stirlingshire and gave his financial support to Watt in his experiments with the steam-engine. On his recommendation, Boulton took Watt into partnership when he wanted power at his Soho Works and at the Cornish copper mines.

THE IRON INDUSTRY

From Elizabethan times the vital problem of the iron industry had been to free itself from what Ashton calls "the tyranny of wood and water" In these days the industry was literally fleeing to the wilderness to escape destruction. It migrated from Sussex, its traditional home, to the Midlands, to Shropshire, South Wales, Cumberland, and even to the Highlands of Scotland, where some Cumberland ironmasters set up furnaces at Invergarry in Inverness-shire in 1727 These movements illustrate to what desperate straits the industry was reduced for want of fuel; but it was beyond the ingenuity of Lancashire to make an iron works pay in the Highlands. The Invergarry Minute-book closed in 1736 with the significant entry:

"Expenses with Gentlemen and Creditors that came for Money and got it not, £2 : 12s. 11d."

In 1709, Abraham Darby, of Coalbrookdale Iron Works, discovered a method of using coal to smelt iron (Fig 27). It had limitations. Not until 1750, when his son improved on it, did iron-masters become enthusiastic about coke-iron. A new age began in Scotland with the founding of Carron

Iron Works in 1759, the first one in the country to use coal and native ores. Before the close of the century it had become the greatest munition works in Europe. Furnaces make pig-iron or cast-iron, which contains carbon and is brittle. To make wrought or malleable iron, capable of taking the strains and stresses of the new machine age, more heating and hammering were needed to remove the impurities This process was carried on in the forges. Here too the urgent problem was how to use coal instead of wood. Several inventors contributed to the solution of the problem. The final step was taken by Henry Cort in 1785.*

The inventions of the Darbys and Cort freed the iron industry from its dependence on wood. Since coal was now the fuel, the industry was attracted to the mines. Industrial concentration followed dispersion, and large-scale production was at length possible. On the basis of these technological changes, the British iron industry advanced rapidly. In 1788 the total output of pig-iron was about 68,000 tons. In 1796 it was 125,400 tons, in 1806 about 250,000 tons, and in 1830 about 678,000 tons. Britain led the way, and between 1806 and 1832 her export of wrought iron quadrupled. Elsewhere in Europe the small charcoal furnace lingered on until the middle of the nineteenth century. Britain had thus entered the new age of coal and iron at least half a century before other countries.

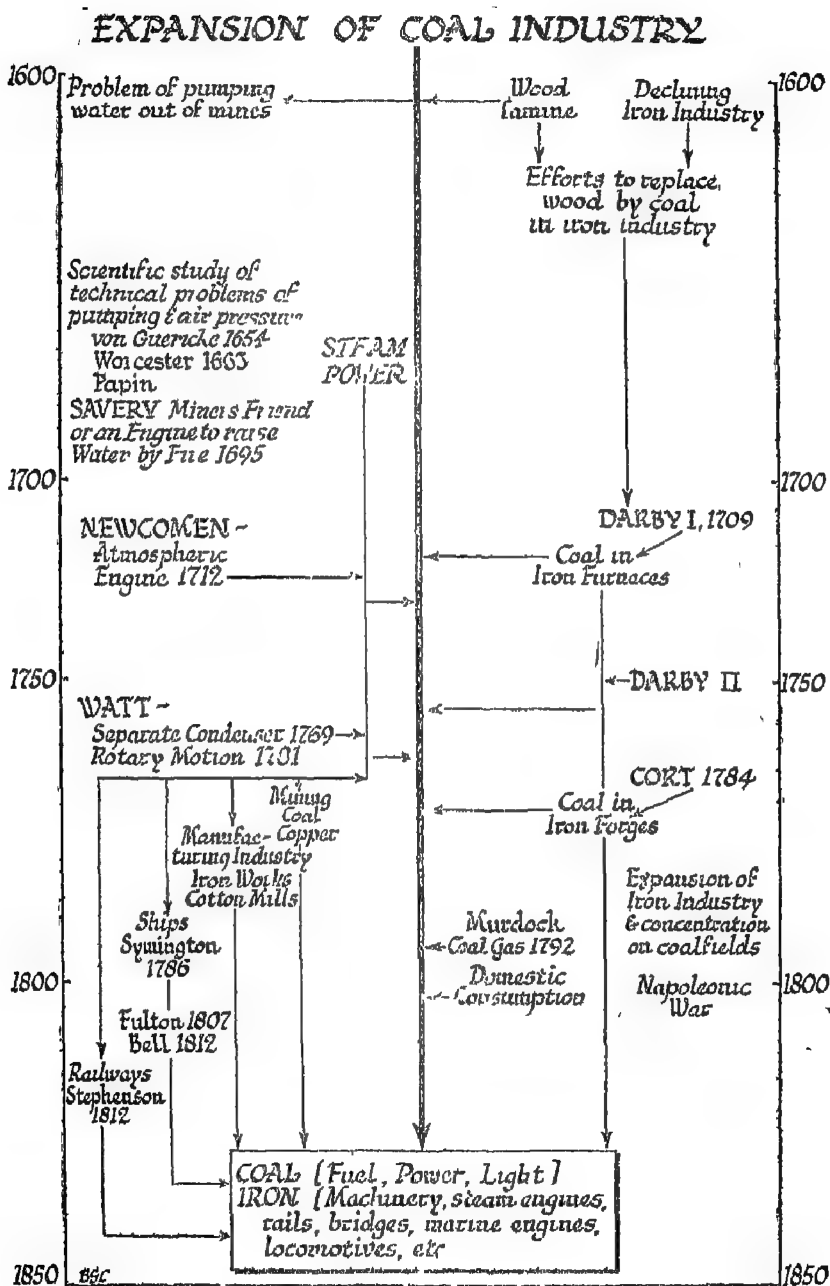
POWER

Another of the great technological problems of this period had also a connexion with coal How to get rid of water in mine workings was so urgent that the industrial advance of Britain demanded a solution. The solution was the first stage in the evolution of the steam-engine. The use of steam at the close of the seventeenth century marks the beginning of the modern era of power production.

Before this time, and indeed long afterwards, the fall of water had been used to turn wheels which supplied power to grind corn, to blow bellows at the iron furnaces, to drive pumping or stamping machines at the mines, and to move the hammers at battery works and fulling mills Wind was used to grind corn, and, of course, from time immemorial until the Victorian era it had supplied the driving power of ships. Some undertakings used animals to turn windlasses geared to machines. In the reign of Elizabeth the expansion of the metal industries and of coal-mining resulted in a wide extension of the use of water power; its value was limited by local conditions. Where mines had no adequate supply of water, deep shaft mining was impossible Since the weight of air is only sufficient to raise water about thirty-three feet, pumps in deep mines have to be used in relays, a cumbersome procedure not adapted to use of water power. Thus one of the major technological problems of the seventeenth and eighteenth centuries was how to tap a more satisfactory source of power. It was the subject of much discussion and experiment in the early meetings of the Royal Society

Though the possibility of using steam power to rotate a wheel was known to the Alexandrian world, the knowledge was not put to practical use until

* See T S. Ashton, *Iron and Steel in the Industrial Revolution*, 1924



TIME CHART 10: BEGINNINGS OF AGE OF COAL AND IRON

the close of the seventeenth century. The most crying need was for an effective pumping machine, and scientists rubbed shoulders with men of affairs in devising a remedy. The necessary theoretical knowledge was advanced by such men as von Guericke, Hooke, the Marquis of Worcester and Papin, who collectively contributed the idea of the vacuum and the cylinder and piston One of the first fire engines, invented by Savery in 1695, was called the *Miners' Friend, or An Engine to raise Water by Fire.* It was based on the idea that steam condensed in an enclosed vessel creates a vacuum. Newcomen (1712) followed with a more effective steam-engine which combined the idea of the condensation of steam in an enclosed vessel and Papin's idea of a cylinder and piston. His invention was called "the atmospheric engine" because it used atmospheric pressure to depress the piston after creation of a vacuum within the cylinder by condensation of steam. The piston was coupled directly to the pump handle without the intervention of any wheel. The Newcomen engine soon became popular in the mines. By 1720 many were at work Later in the century it was used at copper mines, as well as at Boulton's works in Birmingham, and at Wedgwood's pottery works in North Staffordshire. At the two latter works the steam-engine was used to pump back the water that turned the water wheel Apparently, this phase in the transition from water to steam power was quite widespread, as the following citation from a recent brochure on Samuel Crompton* indicates:

"There is one old cotton-spinning mill which was built actually in the town of Bolton, and of which a portion still exists, known as the Bradshawgate Cotton Mill. It was built by James and William Carlisle, and was situated on the outskirts of the town on the Manchester Road . . .

"The most interesting thing about the early days of this mill was the method of driving. The factory, which was most probably built about 1792, was, unlike most other factories, not situated on any stream of water, and consequently was obliged to find some other power for driving the machinery. The power chosen was a combination of water and steam; a lodge was built containing a plentiful supply of water, and a steam-engine of the beam type pumped the water on to a water wheel which turned the machinery, the water, after descending the wheel, was conveyed back to the reservoir. This was probably the first steam-driven mill, if such it may be called, in Bolton."

Newcomen's engine opened a new era in the history of power. It was now possible to work deep mines; and to abolish the cumbersome relays of pumps One of the main hurdles in the full utilization of our coal resources was thus surmounted. At the same time it had a great disability. It was extraordinarily wasteful. In order to create a vacuum within it, cold water was sprayed into the cylinder. This was not necessarily a serious matter at the pit-head, where coal was plentiful, a fact which explains why Newcomen's continued to be used at coal-mines long after Watt had patented his steam-engine. Still, it was a serious matter where coal was not plentiful, as at the copper mines in Cornwall. Besides this defect, Newcomen's engine had another. It was geared to the other end of a beam working on a swivel; a

* p 89, published by Dobson & Barlow, Ltd., Kay Street Works, Bolton, England, 1927.

counterweight was necessary to pull it slowly up again. There were thus two defects to be remedied, the tremendous waste of heat caused by cooling the cylinder at each stroke, and the delay incurred by the mechanism for raising the piston. It was to these problems that Watt applied his ingenuity, when instructed to repair a model of the Newcomen engine for the lectures of Professor Black, himself outstanding as a pioneer of heat measurement.

Watt's remedy for the first defect was the separate condenser. This he patented in 1769. It is significant that the people who financed his experiments were Dr. Roebuck and Matthew Boulton, both of whom had interests in mining. When Roebuck went bankrupt, Boulton persuaded Watt to join him in partnership in the famous Soho Works, Birmingham. Another manufacturer interested in the invention was Wilkinson, the ironmaster, whose improved method of boring cannon was of great service to Watt in the construction of cylinders for his pistons Indeed the first Watt engine was used to blow the blast at Wilkinson's iron works. Immediately afterwards, two engines were dispatched to copper mines in Cornwall The remedy of the second defect of the Newcomen model was to couple the piston to a wheel by what had before been the pump handle The invention of the rotary device in 1782 made it more feasible to use steam power to drive machinery in factories. Three years later, the first rotary steam-engine was installed in a cotton mill. Before 1800 mines, iron works and cotton mills were the chief users of Watt's engines.

A very important technical improvement was incorporated in Trevithick's engine in 1800. The Newcomen engine had used atmospheric pressure to drive the piston in one direction only. Watt's invention of the separate condenser eliminated wastage of fuel to heat up the piston at each stroke and eliminated delay involved thereby, but it did not use the direct power of steam pressure, which can be applied both to drive the piston forwards and backwards. The substitution of direct pressure for atmospheric pressure working against a vacuum entailed further economy of fuel and greater speed of rotary motion.

Introduction of steam power into industry at the close of the eighteenth century was thus the culmination of work extending over more than a hundred years. At first its progress was slow, because effective and workable steam-engines could not be manufactured until a new craft of engineering had emerged and fresh machine tools had been invented. Those who had adequate water power continued to use it for many years to come. As late as 1830 a third of the cotton industry drew its power from water, and in 1850, a seventh. During these two decades, however, steam power rapidly gained ground, because engineering was becoming a highly skilled craft which could furnish adequate machine tools of appropriate accuracy for the task.

The possibilities of steam power in transport were easy to envisage. Watt himself had toyed with the idea of an engine to drive a wheeled carriage, a popular topic of discussion in the Lunar Society. In 1786 William Symington, a Scottish engineer, patented a marine engine, and a few years later he experimented on the Forth and Clyde Canal with a model made at the Carron

Iron Works. In 1807 Robert Fulton used a Soho engine to drive the first steamer on the Hudson River in the United States, and in 1812 Henry Bell, who had been working independently, sailed his *Comet* down the Clyde By the twenties the steamer was getting into the coasting trade, and in 1833 the Canadian *Royal William* crossed the Atlantic under her own steam In 1840 the Cunard Company was founded by Samuel Cunard, a Canadian, and Robert Napier, a Glasgow engineer.

Meantime George Stephenson, engine-wright at a colliery near Newcastle, was planning a locomotive to replace horses on the rails which had long been in use as wagon-ways. In 1814 he succeeded in making a locomotive haul coal wagons to the Tyne six miles away. Eleven years later he used an improved locomotive on the Stockton and Darlington Railway. In 1826 a Stephenson locomotive was employed on the Monkland and Kirkintilloch Railway in Scotland At first these short lines were connected with coal-pits, but with improvements in locomotives, and especially after the successful opening of the Liverpool and Manchester line in 1830 with a speed record of 35 miles an hour, it was clear that a new means of transport had come into being The thirties saw numerous railway schemes put into operation By 1850 a new system of communications was firmly established in Britain. Canals were neglected and stage-coaches were laid up. Steam power had achieved its crowning triumph.

THE TEXTILE INDUSTRIES

One outstanding consequence of the extension of steam power was rapid establishment of the factory system in the cotton industry. In the spinning section this occurred in the last twenty years of the eighteenth century. It was the most spectacular conquest made by industrial capitalism As we have seen, the putting-out system was typical of the industry before this time, except in the finishing stages. There only, something approaching a factory system prevailed. In 1733 Kay invented the flying shuttle, which increased the output of the weaver This upset the balance between spinning and weaving It now required four spinners to supply one weaver with yarn. Henceforward every effort was made to improve the simple spinning-wheel with its one spindle (Figs 28 and 29).

The well-known spinning inventions were the climax of more than a generation of persistent effort Hargreaves' spinning-jenny, consisting of 8 and later of as many as 120 spindles, quickly redressed the balance between spinning and weaving About the same time, in 1769, Richard Arkwright patented a power-driven spinning-machine, called the water-frame, on the lines of earlier inventions of Paul and Wyatt. The fact that his patent was challenged and eventually annulled in 1785, illustrates the point that invention is "usually a social product and not the sole creation of one mind." This invention was important because it involved the use of inanimate power, and thus paved the way for factory production His first cotton-spinning machine was set up at Cromford in 1771, and especially after the annulment of Arkwright's patent, numerous other mills were started in Lancashire and in the Glasgow area. Meantime Crompton's invention of the spinning-

mule, later adapted to power, facilitated the spinning of fine yarn and so enabled British manufacture to rival the fine muslins of India.

These inventions profoundly affected the work of women. Factory machinery now supplemented the cottage spinning-wheels. The transition was rapid. By 1810 hand-spinning of cotton was practically dead, and the cotton industry had become the premier industry of England as well as of Scotland. Scarcity of yarn had first directed attention to improvements in the spinning process. As a consequence of these inventions, the hand-loom weavers could not now cope with the tremendous output of the mills. They became aristocrats of labour, because their services were everywhere in demand. Since weaving is a much more complicated process than spinning, it is not surprising that a power-loom was not easy to produce. Cartwright patented a power-loom of sorts in 1785, but it was of no use to industry until improved some twenty years later by Horrocks and Radcliffe. By the end of the Napoleonic War, power-weaving was making headway in the manufacture of coarse cloths. As late as 1840 there were still thousands of hand-loom weavers engaged in the finer branches of the industry; but they were fighting a losing battle. As the power-looms advanced from coarse to finer work, the hand-loom weavers were driven to the wall. The factory system triumphed, but at a terrible cost to the weavers. The most highly skilled hand-loom weavers—like those in the Paisley shawl trade—continued to fight on till fashion decreed their extinction during the 1880's (Figs 30 and 31).

Improvements of the bleaching process illustrate the close contemporary collaboration between scientists and manufacture, and emphasize the vital part played by chemistry in eighteenth-century economic progress. The common method of bleaching was to treat the cloth with alkaline potashes, prepared by incinerating charcoal, and then to spread the cloth on the grass where the sun acted on it. The whole process took several months, and this applied to linen as well as to cotton. Further progress of the textile industries therefore depended on speeding up this routine. Scarcity of wood made urgent the production of alternative sources of alkali. The basis of the advance was the commercial manufacture of sulphuric acid. Roebuck and Garbett, who were in close touch with the technical problems of metallurgy in Birmingham, went some way to attain this object when they set up a manufactory of sulphuric acid in Birmingham in 1746, and at Prestonpans three years later, to exploit the new and more economical lead chamber process. Francis Home, Professor of *Materia Medica* at Edinburgh University, who, in his own words, was studying "how far chymistry will go in settling the principles of agriculture," was also attracted to the chemical problem of bleaching. In 1758 he was awarded a medal by the Board of Trustees for his researches in this subject. In 1765–9 his own process was being used by a Lancashire firm. Nevertheless bleaching remained a long and tedious business. The next step was the discovery of the chlorine process by Berthollet in 1785, and the introduction of it into Glasgow three years later by James Watt. Success was immediate. Now cloth could be bleached in a few days instead of the few months previously required. At the close of the century, Tennant of Glasgow started the commercial production of bleaching powder.

THE FACTORY SYSTEM

By the combined effect of so many technological advances, industrial capitalism made rapid headway. The iron industry soon settled at the coal-fields, whose attractive power was very strong because it was uneconomical to transport coal more than about fifteen miles. The new power and the new methods of production increased the scale of production. Thus the capital of the Carron Iron Works rose from £12,000 in 1760 to £150,000 in 1771. Mr. Court (*The Rise of the Midland Industries, 1600–1838*, 1938) shows how rapidly the unit of production in the iron industry of the Midlands increased. Early in the century the largest Shropshire furnace produced 500 tons per annum, and the smallest 200 tons. In 1788 the average output was 1,100 tons; in 1796 about 1,500 and in 1806, 1,900 tons.

In the host of trades which made finished goods in metal, the domestic type of organization persisted. For instance, nail-making, a particularly important Staffordshire trade, remained in the hands of a large number of small handicraftmen and domestic workers. Chainmaking retained its domestic character down to the present century. In the nineteenth century Sheffield was full of small people and some, such as scythe and sickle makers, had plots of land. There were countless trades, divided and subdivided. For the making of scissors there were five, for files, four. There were distinct trades of table-knife forgers, hafters, grinders, cutters, pressers; spring-knife blade forgers, spring forgers, scale forgers, hafters, grinders, etc. They usually had their own workshops and owned their own tools, but they were generally employed by merchants.* In the course of the century the factory system advanced in every direction, but some industries were more easily conquered than others, and the small man has managed to hang on in many trades with a persistence that would have surprised Karl Marx.

While the factory system and power production made rapid headway in cotton-spinning, and was pretty general by 1800, weaving succumbed slowly. In 1830 there were between 55,000 and 60,000 power-looms and 240,000 hand-looms. In the cotton mills the worst features of the new industrialism prevailed—long hours, insanitary conditions, child labour, and all the horrors of factory life being repeated in India and the Far East to-day. Large numbers of pauper children were at first employed. Consigned to their employers at the age of seven or upwards, they were bound until the age of twenty-one, boarded in the employer's prentice-house. Even in a good mill the hours were 74 a week, or over 12 a day, Saturdays included.

An early attempt to control this exploitation was the *Health and Morals of Apprentices Act* of 1802. In the early nineteenth century, however, the employment of pauper children was an infamy destined to solve itself. The adoption of the steam engine drew the factories to the towns, where there was an abundant supply of "free" child labour. But conditions for the free were just as bad. Children worked long hours under the eye and often the lash of the overseer, sometimes starting work at six or seven years of age, and working for 14 or 15 hours per day for six days a week. Meal hours had often to be given up to the cleaning of machinery. Robert Owen did

* See *The Cutlery Trades*, by G. I. H. Lloyd, 1913, 445

pioneer work in the improvement of the lot of the children at his New Lanark Mills. He stopped the employment of pauper children, regulated and shortened the hours of others, and established schools Largely through his efforts, the first Factory Act was passed in 1819, but it was the mere shadow of the Bill he proposed. Conditions in the factories long remained deplorable Let us hear the evidence of the factory workers before the Committee on Factory Children's Labour, in 1831–2 (quoted *English Economic History, Select Documents*, ed. Bland, Brown and Tawney, 1914, 510):

5047: At what time in the morning, in the brisk time, did those girls go to the mills?

In the brisk time, for about six weeks, they have gone at 3 o'clock in the morning, and ended at 10, or nearly half-past, at night.

5049: What intervals were allowed for rest or refreshment during those nineteen hours of labour?

Breakfast a quarter of an hour, and dinner half an hour, and drinking a quarter of an hour.

5051: Was any of that time taken up in cleaning the machinery?

They generally had to do what they call dry down; sometimes this took the whole of the time at breakfast or drinking, and they were to get their dinner or breakfast as they could, if not, it was brought home.

5054: Had you not great difficulty in awakening your children to this excessive labour?

Yes, in the early time we had them to take up asleep and shake them when we got them on the floor to dress them, before we could get them off to their work; but not so in the common hours

5063: The common hours of labour were from 6 in the morning till half-past eight at night?

Yes.

5064: With the same intervals for food?

Yes, just the same

5065: Were the children excessively fatigued by this labour?

Many times, we have cried often when we have given them the little victualling we had to give them; we had to shake them, and they have fallen to sleep with the victuals in their mouths many a time.

5072: Did this excessive term of labour occasion much cruelty also?

Yes, with being so very much fatigued the strap was very frequently used.

5073: Have any of your children been strapped?

Yes, every one; the eldest daughter; I was up in Lancashire a fortnight and when I got home I saw her shoulders, and I said, "Ann, what is the matter?" She said, "The overlooker has strapped me, but," she said, "do not go to the overlooker, for if you do we shall lose our work" I said I would not if she would tell me the truth as to what caused it. "Well," she said, "I was fettling the waste, and the girl I had learned had got so perfect she could keep the side up till I could fettle the waste, the overlooker came round, and said, 'What are you doing?' I said, 'I am fettling while the other girl keeps the upper end up'; he said, 'Drop it this minute'; she said, 'No, I must go on with this' "; and because she did not do it, he took a strap, and beat her between the shoulders . . .

5080· What was the wages in the short hours?
Three shillings a week each.

5081 When they wrought those very long hours what did they get?
Three shillings and sevenpence halfpenny.

5082: For all that additional labour they had only 7½d a week additional?
No more.

5083. Could you dispose of their wages, when they had received them, as you wished, did you understand that?
They never said anything to me, but the children have said. "If we do not bring some little from the shop I am afraid we shall lose our work." And sometimes they used to bring a bit of sugar or some little oddment, generally of their own head.

5084· That is, they were expected to lay out part of their wages under the truck system?
Yes

Such was the testimony of Samuel Coulson. Let us now listen in to the evidence of Elizabeth Bentley (Fig. 32).

5127· What age are you?
Twenty-three.

5128 Where do you live?
At Leeds

5129. What time did you begin to work at a factory?
When I was six years old.

5130: At whose factory did you work?
Mr Busk's.

5131· What kind of mill is it?
Flax-mill

5132. What was your business in that mill?
I was a little doffer.

5133. What were your hours of labour in that mill?
From 5 in the morning till 9 at night, when they were thronged.

5134: For how long a time together have you worked that excessive length of time?
For about half a year.

5214: You are considerably deformed in your person in consequence of this labour?
Yes, I am.

5215: At what time did it come on?
I was about 13 years old when it began coming, and it has got worse since . . .

5216· Were you perfectly straight and healthy before you worked at a mill?
Yes, I was as straight a little girl as ever went up and down town.

5217: Were you straight till you were 13?
Yes, I was.

5218: Have you been attended to by any medical gentleman at Leeds or in the neighbourhood?
Yes, I have been under Mr. Hares.

5219: To what did he attribute it?
He said it was owing to hard labour, and working in the factories.

Even by the middle of the century, there was a host of trades outside the textile and metallurgical industries hardly touched by the factory system. The boot and shoe factories of Northampton, of Stafford and of Kilmarnock were growing in importance, but there were still countless small shoemakers who made what they sold. In the building trades there were scores of small employers who had started as journeymen, as indeed there are to-day. The country smith carried on his occupation as his father had done before him. Even in the textiles there were out-workers, handicraftsmen and domestic workers by the score in the second half of the century—sweated, underpaid, and working under intolerable conditions. It was of such workers that Hood sang his *Song of the Shirt*.

"With fingers weary and worn,
With eyelids heavy and red,
A woman sat in unwomanly rags,
Plying her needle and thread—
Stitch—Stitch—Stitch!
In poverty, hunger and dirt,
And still with a voice of dolorous pitch,
She sang the Song of the Shirt."

THE AGE OF COAL AND IRON

The nineteenth century was an age of coal and iron. Coal was fuel and power. It was also light. For many centuries oil and fat from animals and fish had been the only substances used to give man artificial light. Continental chemists had experimented with coal gas before William Murdock, a Scotsman in the employment of Boulton, lit his office at Redruth, in Cornwall, in 1792. At the peace celebrations of 1802, Murdock lighted up the Soho Works in Birmingham with gas. Shortly afterwards, several people in Glasgow fixed up retorts, and lit their offices and shops. The critics rejected the new light:

"We thankful are that sun and moon
Were placed so very high
That no tempestuous hand might reach
To tear them from the sky.
Were it not so, we soon should find
That some reforming ass
Would straight propose to snuff them out,
And light the world with Gas."

Soon after the end of the Napoleonic War, the chief towns were using gas, but Manchester alone had a municipal gas works. The many domestic and industrial demands for coal resulted in a phenomenal extension of mining. It was, says Ashton, "a headlong, almost devastating expansion," due not

so much to technological advances as to the stupendous consumption of a rapidly increasing population whose country was becoming overwhelmingly industrial. Technical advances connected with drainage, ventilation and haulage, by means of steam power reinforced the effect of growing demand. By 1825 some mines were worked to a depth of a thousand feet, but there were a great many shallow ones, and open working persisted in different parts of the country. In the northern counties of England, in Scotland and in Wales, some of them still retained sloping drifts or ladders used by miners who carried coal in baskets perched precariously on their heads.

Some districts employed women for this laborious and dangerous work. Whether machinery was installed or not depended on costs and navvy labour was cheap and easy to exploit. Below ground the problem of haulage was variously tackled; but women and children usually did most of the work. A Commission of 1842 disclosed a state of affairs which made Britain gasp. Child labour was plentiful and was shamefully exploited.

> "Girls," says the Sub-Commissioner, "regularly perform all the various offices of trapping, hurrying, filling, riddling, tipping, and occasionally getting, just as they are performed by boys. One of the most disgusting sights I have ever seen was that of young females, dressed like boys in trousers, crawling on all fours, with belts round their waists and chains passing between their legs, at day pits at Hunshelf Bank and in many small pits near Holmfrith and New Mills, it exists also in several other places "

Children were commonly employed to open and to shut ventilation traps. They were compelled to sit for hours in niches cut out in the coal, where their work, in the words of the Commissioners, was "solitary confinement of the worst order." The conclusions of the Royal Commission sum up this deplorable state of affairs Of coal mines they say:

> (1) That instances occur in which children are taken into these mines to work as early as four years of age, sometimes at five, and between five and six, not unfrequently between six and seven, and often from seven to eight, while from eight to nine is the ordinary age at which employment in these mines commences.
>
> (2) That a very large proportion of the persons employed in carrying on the work of these mines is under thirteen years of age; and a still larger proportion between thirteen and eighteen
>
> (3) That in several districts female children begin to work in these mines at the same early ages as the males.
>
> (4) That when the workpeople are in full employment, the regular hours of work for children and young persons are rarely less than eleven, more often they are twelve, in some districts they are generally thirteen and in one district they are fourteen and upwards.

These revelations were immediately followed by the first Mines Act of 1842. This prohibited underground employment of women and girls and of boys under ten without diminishing the net output of the industry. The domestic, industrial, transport and export demands for coal are reflected in the upward curve of coal production. Increased output meant deeper mines, and deeper mines meant greater danger to the workers. Sir Humphry Davy's safety-lamp of 1815 was a valuable defence against explosion, the

dread enemy of the miner, but improved ventilation was also essential. By means of Mining Acts from 1850 onwards, and by the grant of increased powers to the mining inspectorate, the Government encouraged and compelled more adequate aeration and safety measures. Learning from abroad, mining engineers perfected methods of mechanical ventilation. After 1840 there were improvements of haulage. The metal cage capable of carrying coal and miners, took the place of sloping drifts or the simple rope from which the miner dangled as he was lowered or raised. Below ground, iron and later steel rails were laid down; and pit ponies were used for draught. In the actual working at the coal face, there was little change until the present century. In 1913 only 8 per cent of British coal was mechanically hewn. In 1928 it had increased to 24 per cent, and in 1931 to 35 per cent; but in some districts the percentage of coal mechanically cut was higher. America and Germany have a much better record. Foreign competition has compelled coalmasters to instal more modern plant.

The iron industry was built on the coal and ironstone mines. Above all, it required cheap fuel, because heat was required at every stage of production. In 1830 Britain's output of pig-iron was 678,000, in 1847, 2,000,000 and in 1855, 3,218,000 tons. During these years the Scottish iron industry made remarkable progress owing to the invention of the hot blast by Neilson in 1828. The hot blast permitted use of raw coal in the furnaces as well as blackband ironstone, of which there were large deposits in Lanarkshire It was at this time that the Clyde gradually forsook cotton and established her great group of metallurgical industries As it came from the blast furnaces, the pig-iron passed either to the foundries where it was cast into finished products, or to the puddling furnaces where it was converted into wrought iron, used for the making of rails, locomotives, ships and machinery The puddler thus stood between the blast furnaces on the one hand, and the engineering works and the iron shipbuilding yards on the other. He was the "key-man of the metallurgical world" All day long smoke and gas belched from the blast furnaces and the puddling furnaces which they fed. Each year saw an increase in their capacity and their size, but the value of the by-products were not appreciated at first; and for long they were allowed to escape into the atmosphere. The Black Country became blacker, except at night. Then it became an inferno as flames from the furnaces lighted up the sky. Dickens thus describes the Black Country about 1840 (*The Old Curiosity Shop*):

"On every side, and far as the eye could see into the heavy distance, tall chimneys, crowding on each other, poured out their plague of smoke, obscured the light, and made foul the melancholy air On mounds of ashes by the way-side, sheltered only by a few rough boards, or rotten pent-house roofs, strange engines spun and writhed like tortured creatures, clanking their iron chains, shrieking in their rapid whirl from time to time as though in torment unendurable and making the ground tremble with their agonies Dismantled houses here and there appeared, tottering to the earth, propped up by fragments of others that had fallen down, unroofed, windowless, blackened, desolate, but yet inhabited Men, women and children, wan in their looks and ragged in their attire, tended the engines, fed their tributary fire, begged upon the road, or

scowled half-naked from the doorless houses. Then came more of the wrathful monsters, whose like they almost seemed to be in their wildness and their untamed air, screeching and turning round and round again, and still, before, behind, and to the right and left, with the same interminable perspective of brick towers, never ceasing in their black vomit, blasting all things living or inanimate, shutting out the face of day, and closing in on all these horrors with a dense dark cloud

But night-time in this dreadful spot! Night, when the smoke was changed to fire, when every chimney spirted up its flame, and places that had been dark vaults all day, now shone red-hot, with figures moving to and fro within their blazing jaws, and calling to one another with hoarse cries,—night, when the noise of every strange machine was aggravated by the darkness; when the people near them looked wilder and more savage, . . . —night, which, unlike the night that Heaven sends on earth, brought with it no peace, nor quiet, nor signs of blessed sleep,—who shall tell the terrors of the night to the young wandering child!"

THE AGE OF STEEL

Steel is a form of iron which contains a small proportion of carbon, with or without other elements which contribute to its hardness. It has a long history behind it in Sheffield; but the process of production was costly. So steel was used only for special products. In the early eighteenth century the best steel cost five times as much as wrought iron, and in the fifties, when Britain was "the workshop of the world," the output of steel was only 40,000 tons against 3,000,000 tons of pig-iron. Puddling was a laborious and expensive process. How to get rid of the impurities in pig-iron by a cheaper and more efficient method was a major technical problem of industrial Britain in the middle of last century.

Foremost among those who helped to solve it was Henry Bessemer (1813–98), an inventor of no mean order. He had numerous useful and curious inventions to his name In his old age he spent his time designing a ship's saloon that would not rock. For he was a bad sailor. He turned his ingenuity to problems of iron production during the Crimean War, when he was employed in making cannon. He realized that steel would be more efficient than iron for this purpose; and found the solution of the problem in 1856. His recipe was to run molten pig-iron into a "converter," driving a powerful hot blast through the fluid metal to remove the impurities, carbon and silicon. The right proportion of carbon could be added afterwards. This proved to be an extraordinarily simple and cheap way of making steel. Output rose six-fold between 1856 and 1870, while the price per ton fell about half.

Meantime Siemens (1823–83), whose family had founded the famous German firm of Siemens and Halske, pioneers of electrical engineering in Europe, discovered another way of making steel. Siemens had studied science at Gottingen, and his main contribution was the application of his knowledge of the economy of energy to the metallurgical industries, and in particular to the making of steel. Instead of Bessemer's large container or converter, he used an open-hearth furnace The hot air reached the furnace through regenerative chambers, heated by a current of burning gas which brought

the air to a very high temperature. Moreover, the heat and the current of air could easily be controlled. The principle of the regenerative furnace was of wide application. In a few years it was applied to all kinds of furnaces.

Neither process—that of Bessemer nor that of Siemens—eliminated phosphorus. So pig-iron containing this element could not be used for steel-making. For a time steel makers were restricted to hæmatite or non-phosphoric ores, of which there was a much more limited supply. Native resources of Cumberland were supplemented from Sweden and Spain. The beginning of steel manufacture thus coincided with the northern drift of the English iron industry to the coast where it could readily obtain supplies of ore from abroad. In 1870 the import of ore was less than half a million tons, and the output of steel less than a quarter. Ten years later, importation exceeded three million tons and the make of steel touched one and a quarter million tons By this time the problem arising from the presence of sulphur in ores had been solved by Gilchrist Thomas, a London Police Court clerk, who studied chemistry in his spare time, aided by his cousin P. C. Gilchrist, an industrial chemist by profession.

Phosphoric ores in Britain, Germany, Belgium, Luxembourg, and the United States were now available for steel manufacture. Britain was a little slow to move. She already had a number of Bessemer plants importing ores from abroad, and was the world's greatest producer of wrought iron, which steel now sought to replace. Hesitatingly she built some new steel works, and converted old wrought-iron works to handle the new process. On the other hand, Germany started with a clean sheet; and went straight forward on the basis of modern technology and large-scale production. The demands for steel were limitless. In shipbuilding it replaced iron immediately because it is more ductile, of greater tensile strength and greater elasticity than wrought iron.

The Clyde, the main centre of British shipbuilding, quickly took up steel. In 1879, 10·3 per cent of the total tonnage launched was of steel. Ten years later it was 97·2 per cent. Cheap steel struck the final blow at the old sailing-ship. By the end of the Victorian era the steel steamer was supreme on the seas. On land, steel rails proved to be much more economical than iron. In locomotive works, the engineering shops, and in constructional engineering works of all kinds, steel was taken up quickly The Eiffel Tower, built in 1889, symbolizes the new age.

"But that tower," says Heaton, "was only a sightseer's elevator shaft, and the real temples to steel were built on the other side of the Atlantic. The Flatiron Building in New York was the first steel-framed chapel of the new faith, and the Woolworth Building was its first cathedral" (523).

Everywhere to-day one sees the achievements of steel. It may be a steel bridge far surpassing in utility, beauty and magnitude the puny structures of fifty years ago It may be the mighty tools of industry, the steam hammer, the electric rolling mill, the electric forging crane capable of moving castings of three hundred tons. It may be the structure of a picture house, of a block of offices, or of a bank headquarters. It may be a steamer of 80,000 tons, a train capable of travelling at 70 miles an hour, or a motor car.

ELECTRICITY AND OIL

The steel pylons carrying electricity to towns, villages and farm-houses typify the age of steel and electricity which we had entered by the nineties. They stand for cleanliness, for the possibility of decentralization of industry, for the abridgment of labour, for light, for a healthier and more wholesome life.

Britain was slow to take up electricity, because she had abundant supplies of coal, long-established industries, and a profound faith in the superiority of steam which had made Britain the workshop of the nineteenth-century world. Germany and the United States also had large coal resources; but they were young industrially, and they led the world in the adoption of electric power, while countries without coal, such as Norway, Sweden, Switzerland and Italy, welcomed it as a new instrument well suited to their needs. As early as 1901 a factory inspector wrote:

"in the age of steam, this country led the way, whereas in the age of electricity we seem to follow America and other countries."

Much of the pioneer work on which the age of electricity was based was done in Britain by Faraday, Wheatstone, and others. By 1880 the electric telegraph and the cable had come to stay. Edison, an American, and Swan, an Englishman, had independently invented the incandescent electric lamp; Graham Bell, a Scot, had demonstrated a telephone before Queen Victoria at Osborne, and the dynamo was on trial. The uses of electricity were obvious, but cheap coal on the one hand, and the high cost of electrical equipment on the other, made British manufacturers hesitate to exploit it. The arguments in favour of cheap coal were reinforced by the invention of the internal combustion engine which used gas, and which was quickly taken up by the light industries. By this means many a small workshop turned into an embryo factory.

The invention of the steam turbine by Sir Charles Parsons in 1884 was in principle a reversion to the ancient Alexandrian steam wheel. It proved to be of great importance in a period of transition. It provided a more efficient engine for driving dynamos. It was to become, says Clapham,

"the link mechanism and in time the economical link mechanism, between coal and electricity. . . . . The fuel economy, the high speeds, the wide range of efficient working with varying loads, the compactness which enabled immense power to be generated in small space, all commended the turbine to engineers in charge of large central generating plants, where such existed."

Production of electric power and of light proceeded on the basis of unco-ordinated private enterprise, as was inevitable at the time. Power stations of varying voltage, frequency and generating cost sprang up all over the country, and there were hundreds of supply undertakings charging every variety of rates. At the conclusion of the war of 1914–18 there were about seventy generating stations in London, fifty different systems of supply, twenty-four different voltages, and ten different frequencies. Thereafter efforts were made to rationalize this industry. In 1926 the State established

a Central Electricity Board to build a "grid" for the distribution of electricity from specially selected great-power-stations to every parish in the country. The stations are privately owned, but the whole output is sold to the Board, who in turn sell it to the various distributors. This scheme has already effected valuable economies, but it is a first step to a publicly planned system of power production. While the output of the industry compares favourably with that of most European countries, apart from Switzerland, Sweden and Finland, we are still a long way behind Canada, the United States, and New Zealand.

PRIVATE ENTERPRISE AND CORPORATE ENTERPRISE

Progress of industrial capitalism and the establishment of the factory system involved changes of ownership and control which are of fundamental importance. Some people see the result as a struggle between free capitalism and socialism, or between fascism and communism But the issue is not really so simple as the protagonists of any party would have us believe. The large industrialist, who proclaims the right of private enterprise, is destroying private enterprise by absorption, amalgamation and combination. Consequently the business of great industries is more the work of corporate enterprise than private enterprise. In vast business organizations of so-called private enterprise, technical and salaried staff, more interested in doing their job well than in making profits for absentee and functionless shareholders, have now acquired a powerful position. At the same time the State, in some form or another, is increasingly intervening in economic life It has taken certain services under public control, such as postal communications and national broadcasting. It has compelled large schemes of reorganization, as of electricity, of coal-mining, or of the marketing of agricultural produce. Whether the impulse has come from vested interests anxious to safeguard industry from imminent collapse, from a wave of nationalism which glorifies national over sectional interests, or from rearmament and war, the final result is much the same. The fact of ever-increasing intervention in the interests of efficiency and towards co-ordination of effort is the outstanding consequence. Variety of industrial organization co-exists with extension of State control, often effected before the war by Conservative governments under protest that they were preserving private enterprise against the rising tide of socialism.

In this setting the answers to questions which perplex many of us are not at all obvious. Is there a fundamental difference between national socialism and Soviet socialism as an *economic* system? What is the relation of the New Deal in America to these trends in disturbed capitalism? Are European countries really marshalling the forces of capitalism and socialism for the final conflict, as Marx predicted? Or is a new grouping of classes being formed under the stimulus of technological advance and joint stock enterprise? It may help us to get a new perspective if we look at the background of these problems.

As it grew up around 1800, the factory system involved large investments of capital in plant and machinery. In earlier times when large resources were

necessary, as in mining or the metal industries or overseas shipping, partnerships or companies were formed. This type of corporate ownership of capital received a severe shock in the speculative crash of 1720. The Government, believing that company-promotion was the cause of the trouble, passed the Bubble Act which denied the status of company to bodies not actually incorporated by Crown or Act of Parliament. In the course of the eighteenth century the problem of obtaining enough capital was solved by adding new partners. Like those who founded the Carron Iron Works, they were usually engaged actively in the business. In the early stages of the factory system there was abundant scope for private enterprise, and extensions of plant were generally financed by ploughing back profits into the business. Hence some men rose from humble beginnings to positions of great wealth and importance Robert Owen, Matthew Boulton, Richard Arkwright, John Wilkinson, Josiah Wedgwood, all famous and foremost industrial figures of their day, built up their undertakings on principles of thrift, perseverance and hard work. In more recent times there have been the Vickers, the John Browns, the Thomas Liptons, the Andrew Carnegies, and so on.

No one who knows the facts disputes this; and no one who knows the facts denies that this type of industrial or family business has ceased to be representative. Indeed, it has not been really representative for a couple of generations. The growing mechanization of industry created an insatiable demand for capital and compelled employers to look beyond their own immediate circle for assistance. They had two obstacles to overcome. In the eyes of the law, a partnership was simply a collection of individuals. It had no legal personality like a chartered company This obstacle was removed by an Act of 1844 which provided for the incorporation of companies by simple registration; but another remained. A shareholder, no matter what share he held, was liable to the full extent of his wealth to meet the liabilities of his firm. This was unsatisfactory from the standpoint of the business man, because it prevented many people from lending money to industry. The difficulty was removed in 1855–62, when the liability of the shareholder was limited to the amount of shares held, provided the company complied with certain conditions Thereafter the *joint stock system* grew rapidly At first many people believed that company organization was suitable only for large businesses. The claim of the small business to have limited liability, while retaining something of its old privacy, was recognized in 1907. This brings us near to our own time. In fact, many of the readers of this book were then alive.

Thus something new has happened during a lifetime. The growth of these companies has brought about a separation between ownership and management. The mass of shareholders may not have the slightest notion of what the business is about. They are content to remain inactive without even attending shareholders' meetings. They are socially functionless. Directors generally have to contribute a minimum of capital; but management and staff are chosen because of their business or technical ability A new civil service of industry, which has brought something of the professional spirit into business, has come into being Inevitably they measure the success of business by new standards. Inescapably also a critical attitude

to the credentials of capitalism is no longer confined to the workers whom capitalism dispossessed in its initial phase. For few of the generation now assuming manhood and womanhood has the criterion of profit the sacredness it had for those who enjoyed a comfortable niche in the Victorian pattern of social life.

AMALGAMATION AND COMBINATION

The growth of company organization has facilitated the process of amalgamation and combination, and this has been another significant feature of recent industrial history. Combines, of course, are not new. In the eighteenth century they existed in the copper trade of England, in the coal trade of Newcastle and Lanarkshire. But in the fifty years before the war of 1914–18 the movement was greatly accelerated through the adoption of the company system. The search for more efficient organization, the urge to reduce real costs, to eliminate cut-throat competition which reduced profits to a minimum while involving wasteful expenditure in advertising and in marketing, were the chief reasons. This has happened in two ways. In the first place, there is vertical combination or integration, typical of the metal industries. It is clearly desirable for the steel works to have its own blast furnaces, where the pig-iron is produced, and its coke ovens which supply the furnaces with their fuel. It is also advantageous for such an integrated company to own its own coal and iron-stone mines. A Government Report of 1927 states that pig-iron manufacturers now control about 72 per cent of their total ore supply, and about 62 per cent of their total coal, besides large quantities which they sell in the open market The size of a modern steel plant is determined by scientific and technical considerations. At the end of the war of 1914–18 it was estimated that a modern steel plant must have a minimum capacity of 300,000 tons of steel ingots per annum if it is to work economically.

Meanwhile there has also been horizontal combination, i.e. union of undertakings which do essentially the same sort of work. The distinction implied by this term is not clear-cut. For some companies illustrate both tendencies, and there is in fact bewildering variety of combination. Some combines are of the trust type, which may be one gigantic company, such as *Imperial Chemicals*, with its authorized capital of £95m; or a large company which dominates and controls others apparently independent. Some are *cartels* whose various firms hand over their products to a selling agency owned by themselves. Some are price associations which fix prices and allocate output to the several constituent companies. Whatever form they take, the process of fusion has been facilitated by the joint stock company system, and the driving force has usually been the economies obtainable by use of modern technical, scientific, and administrative methods; but there are many combines that effect no economies. They exist solely to exploit the community.

All these trends towards integration and combination, however, mark a new phase in the organization of industry. The war of 1914–18 had a permanent effect on the organization of economic life, because it speeded up the process. Manufacturers and Government alike were forced to realize what great

economies can be obtained by unification and co-ordination. We became accustomed to planning, and though war controls were relaxed at the end of hostilities, we did not go back to pre-war conditions. Thus the tendency towards larger units, to amalgamation and combination, to scientific planning, received an impetus from war experience. The effects of the second world war will be more drastic and fundamental. Out of the welter of conflict we shall be brought immeasurably nearer to a socially planned economy.

We should therefore be able to discuss whether an industry should be publicly owned, dispassionately, without reference to the virtues of a capitalist system which has ceased to exist, or a socialist economy which has not yet come into being. One reasonable conclusion to our narrative is this. To take over an industry which is already doomed to extinction is bad socialism, though the proposal to do so might have the unanimous support of the shareholders and the enthusiastic advocacy of the Trade Unions. The other side of the picture is that the price mechanism as the pacemaker of economic effort has outlived its usefulness. Wherever we turn we see the signs of its doom. With its rigid control of the price system, national socialism was almost as different from capitalism as Soviet socialism. In America the New Deal has raised hopes among those who would benefit from State assistance, and opposition from those who stand for the divine right of private enterprise to do as it wishes. Whether welcomed or opposed, it has introduced into economic life something which has come to stay.

The emphasis of the socialist movement which attracted the support of the wage-earners during the latter half of the nineteenth and first two decades of the twentieth century was on common ownership of industry, with little concern for the technical possibilities of its control. The new middle class increasingly responds to the appeal of proposals for further state control as an instrument of technical development. The aspirations of both sections of the larger body of employed people are in more or less open conflict with those of the small business man and contracting class of petty tradesmen. The communist analysis of the resulting situation is reasonable, in so far as the directors of big business are disposed to come to terms with proposals for state control of industry while sharing control of the state with the social personnel to whom they have already delegated the control of industry; but it is a gross over-simplification of the issue to maintain that we have before us a straightforward choice between hundred per cent communism, i e. common ownership with control, and fascism, i.e. state control without democracy or common ownership.

That a final struggle between the massed forces of capitalism and the factory workers is the inevitable sequel is a myth. Those who stick to it, no less than those who extol the benefits of free competition, are living in the past, when the joint stock company was still on trial, and universal education was still a pious hope. Tremendous social changes have followed the spread of the joint stock company and the introduction into industry of a personnel employed for highly specialized technical and administrative skill, fostered by publicly endowed education. In the last hundred years, and more especially during the past three decades, a new middle class has come into existence. Education and the public services have given us a

growing body of teachers, doctors, civil servants. Company organization combined with modern technology has given us a large class of business and scientific experts. This new middle class occupies a key position in economics and politics They are neither wedded to the capitalist creed nor to the wage-earning class. Whether they turn to fascism or to a socially-planned economy depends very much on the appeal made to them.

In Germany and Italy, national socialism and fascism were largely supported by middle-class people, who have a vague fear that their savings, their security, their place in society is threatened by socialism; but their concern for efficiency and their professionalism might well be enlisted in the service of a democracy prepared to plan an economic system for general well-being on scientific lines, and ready to tackle social problems or international conflict with the same determination of earlier generations which tackled cholera or the plague.

Those who are trained to render useful service to society cannot shut their eyes to the social waste of large-scale unemployment, of closing works down when there are obvious human needs to be satisfied, of making plant produce below capacity and of destroying products for which there are crying demands. They have reasons for questioning the aims and methods of industry which owners and trade unionists with vested interests in the *status quo* cannot share. Their attitude, their aspirations, their choice, far more than that of organizations of wage-earners brought into being by the abuses of uncontrolled capitalism in its aggressive youth, are likely to shape the destiny of our own country and that of other industrial nations which now have previously unforeseen and unimaginable powers for making full use of their material and human resources for the benefit of the human race.

MAN'S DOMINION OVER MATTER

One of the signal contributions of the capitalist system to social development is that it achieved such stupendous mastery over man's environment In one of the exciting debates on the Reform Bill, little more than a hundred years ago, Macaulay declared with justifiable pride. "Our fields are cultivated with a skill unknown elsewhere, with a skill which has extracted rich harvest from moors and morasses. Our houses are filled with conveniences which the kings of former times might have envied. Our bridges, our canals, our roads, our modes of communication fill every stranger with wonder. Nowhere are manufactures carried to such perfection. Nowhere does man exercise such a dominion over matter." Compared with the achievements of our own age, the fumbling efforts of farmer, mechanic, and industrialist of that time fade into insignificance. Ever since then, man's dominion over matter has increased at a rate which baffles understanding. When the social history of the last fifty years comes to be written, technological advances and the progress of science in work and health will occupy a prominent position, but it may well be that we are only at the beginning of the most amazing period in the history of life on earth.

If so, what may most surprise our grandchildren will be the obstinacy with which we cling to an economic system with a record of little more than

two hundred years out of two hundred thousand years of human existence behind us, too much blinded by the short-lived success of the experiment to discern the manifest signs of its present decadence. "Millions are unemployed now because a proportion can supply the present needs of mankind," says H. G. Wells That is the sufficient answer to the question: does the price system and the profit motive still work For what Mr. Wells says is sober truth. A few years ago the following heading appeared to a newspaper article (September 16, 1938)·

SURPLUS WHEAT
365 Million
Bushels
"UNWANTED"
Embarrassing Crops

It would be easy to multiply examples of the same sort. Attempts to solve the problem of the gap between productive capacity and consumption, by curtailing output and destroying goods, are a tacit confession of the failure of capitalism. An age of plenty is now within our grasp; and if any reader thinks it is tiresome to talk as if there is plenty of everything for everyone at the present moment, let there be no mistake about our terms. They do not imply that there are or should be sufficient fur coats, diamonds, sports cars and limousines, grand pianos, servants and cigars. The price mechanism has failed because it is destroying or immobilizing the resources man has created, because it sacrifices possibilities of further technical advance to every whim of the consumer provided it is backed by money. Thoughtful people can no longer avoid asking whether the problem of production and consumption can be solved by deliberate planning of our resources to meet a demand that can be estimated, as basic human needs—food, clothes, housing, furniture—can be estimated. Need the satisfaction of basic human needs be left to the operation of the price mechanism of private enterprise? Is it possible to regulate human work by the calculus of human requirements and human resources for satisfying them?

A hundred years ago, Carlyle wrote· "And now the world will have to pause a little, and take up that other side of the problem, and in right earnest strive for some solution of that. For it has become pressing. What is the use of your spun shirts? They hang there by the million unsaleable; and here, by the million, are diligent bare backs that can get no hold of them. Shirts are useful for covering human backs; useless otherwise, an unbearable mockery otherwise. You have fallen terribly behind with that side of the problem" Since Carlyle's day wages have increased and the standard of living has been raised, but the essential problem he stated has become more insistent "What is the use of your spun shirts? They hang there by the million unsaleable."

CHAPTER VIII

CAPITALISM IN AMERICA

THE two major divisions of the Anglo-American speech community in the world of to-day severed their political ties on the threshold of those technical innovations which ushered in the century of industrial capitalism Certain general features of the outcome are common to both continents; but there are profound differences due to a variety of circumstances. On one side of the Atlantic the new economic system had to fit into a civilization with an established tradition, transmitted from one generation to another, of comparatively homogeneous local origin, in a territory where there was comparatively little elbow room for expansion and a relatively narrow range of climatic conditions. The American scene was vastly more spacious and also more variegated than the British islands Differences of climate had divided the colonies of the north and south long before the Declaration of Independence in 1776 Each had its own distinctive economy and its own social creed. The region over which the flag of the United States now waves had already attracted settlers from many parts of Europe. They had, and for fully a century later they continued to have, a hostile aboriginal population on their borders. They had imported, and continued for nearly a century to import, a slave population from Africa. They had vast unexplored territories awaiting conquest where native Indians still roamed, or tempting peaceful exploitation where there was no pre-existing settlement. The empty spaces of a vast continent proffered an invitation to improvise, and the pioneer who accepted the challenge of physical hardship had nothing to fear from the dead hand of tradition.

Inevitably the process of making so vast a region habitable and inhabited by drawing on the human resources of Africa and Europe generated problems of social adjustment with no parallel in the modern history of Western Europe. Their solution is not yet in sight; but the circumstances which bequeathed them also brought to American life a tolerance, a freshness of outlook and an adventurous hopefulness lacking in countries whose tradition had been shaped by centuries of settled existence. To a large extent it also accounts for the absence of a rigid social stratification so characteristic of Western Europe. Though many of the newcomers were impoverished and underprivileged, many others were representative of the most vigorous and enterprising personnel of the lands from which they had come. Not a few were political refugees smarting from social abuses they had no inclination to perpetuate or to condone in the country of their adoption. The country itself, with such boundless opportunities and so great a need of manpower, recognized no barriers of creed or class among its European settlers Settlement proceeded slowly for the greater part of a century, following at first the coast and the valleys of the great inland rivers. When the railway and the steamboat reached the continent, a human torrent broke over its western half.

NORTH AND SOUTH

Until well into the nineteenth century the United States embraced two different civilizations, so deeply divided from one another that a clash was inevitable At the root of this fundamental cleavage were geographic and climatic factors which had determined the broad lines of development from the earliest colonial days In the north the outlook of the settler was similar in many respects to that of artisan or merchant in Britain whence most of the people had come. The climate was temperate. Only by hard work and intensive farming could the settler make ends meet. To be sure land was plentiful, but transport facilities were poor, and the Indian lurked in the background The settlers, therefore, worked on farms much in the way of their cousins on the other side of the Atlantic. Population was less scattered than in the south. Hence village and town life appeared early. Economic activity was largely determined by the nature of the environment. Shipbuilding, which became a notable industry of New England as well as of New York and of Pennsylvania, owed its initial impetus to abundant supplies of native timber. It was fostered by the English Navigation Acts. Before the days of ocean-going steamers America led the way in building the fast clippers which sailed the seven seas. Shipbuilding led to shipping; and so to the carrying-trade. The ships of the New Englanders traded with the southern colonies and with the West Indies, exchanging the agricultural produce of the North for molasses and tobacco Molasses in turn provided raw material for rum-making, and so to a distilling industry at home. The rum was easy to dispose of in Africa. Many a New England ship found full and profitable employment in the slave trade.

The northern states, therefore, had several flourishing industries during the half-century after the union. The chief characteristic of their economy was diversity of products and general self-sufficiency. Partly because methods of farming and manufacturing did not offer opportunities for their profitable employment, partly, too, because the climate of the north was unsuitable for African negroes, slave labour played little or no part in the system of production. A very different state of affairs existed in the south. Soil and climate were adapted to growing tobacco, sugar, cotton and rice. White labour was scarce and unsuited to the climate Slave labour was prevalent. The crops grown, the unlimited amount of land available for cultivation, and a never-ending stream of slaves from Africa determined the methods of production and indeed the whole economy of the south (Fig 33)

The *plantation system* so characteristic of the south was one of large estates owned by white capitalists and worked by negro slaves. The methods of cultivation were wasteful in the extreme, but land was plentiful and there was little incentive to care for the soil. As years went by cultivation extended westwards and land once fertile became barren and deserted During the first half of the nineteenth century the plantation system was conservative. Those who operated it were well satisfied, and with reason. Amid all the changes of the outside world, it had remained unchanged for two centuries. The mould of southern society had become crystallized. The southerner was content with his way of life and his social outlook, unperturbed by

intransigeant forces which were transforming life in the northern colonies. He exported staple crop produce and imported manufactured goods, indissolubly linked thereby with Europe and especially with Britain By the same token, he favoured free trade and scorned self-sufficiency.

There were thus, in effect, two social systems, one free, the other slave. One on the whole self-sufficient, favouring protection, the other was dependent on foreign markets for the sale of its produce. Needless to say, there were also opposing interests in each area. The farmers in the north did not always see eye to eye with the manufacturers In the south, the small men who employed a slave or two did not feel that their interests were invariably those of the large planter. With due allowance for such variations, it is broadly speaking true to say that a wide gulf separated the systems of north and south. Their social texture, their economic creeds, their moral convictions were characteristic. A clash of interest was a matter of time. So long as settlement was confined to the old colonies and exchange between north and south was based on mutual advantage, the situation was seemingly stable. Once the Union proceeded by settlement or by negotiation, by purchase or by annexation to extend its dominion beyond the Appalachian mountains to the Pacific, the incompatibility of the two systems became manifest. Each hoped to strengthen its own privileges by extending its system to the new lands.

Before the great Louisiana purchase of 1803 settlers from the old states were pushing inland from the Atlantic. The direction of their advance was determined by nature. Through breaks in the Appalachians, intrepid pioneers carried civilization to the western banks of the Mississippi. From New England settlers moved north-westwards along the Hudson to the Great Lakes; from Virginia they crossed the mountains to the Valley of the Ohio; and from the Carolinas and Georgia they pressed on to the Mississippi. Before 1800 Ohio was quickly filling up Southwards, Kentucky and Tennessee rapidly attracted other settlers. By 1790 they were reported to have a combined population of 100,000. These states, now admitted to the Union, offered boundless opportunities to hardy immigrants who did not shirk toil. The typical settler was the farmer growing his own food and making his own clothes, living a tough yet satisfying life The typical unit was the freehold farm. "In this immense domain," say Charles and Mary Beard in their brilliant book *The Rise of American Civilization*, "sprang up a social order without marked class or caste, a society of people substantially equal in worldly goods, deriving their livelihood from one prime source—labour with their own hands on the soil." To such the Mississippi was an indispensable highway Down its broad waters they sent food, tobacco, corn, hemp, wheat, pork and lumber. New Orleans was their gateway to the outer world. With other Americans who were confident in their own destiny, they were determined to add to their dominion the control of this whole vast vital waterway. The outcome of negotiations to purchase Louisiana from France threw into the lap of the United States a territory more capacious than the measure of their hopes. It stretched from New Orleans to the frontiers of Canada, combining within its ample folds the whole basin of the great river.

Rivalry of slave and free state was already in evidence when the Convention drew up the Constitution in 1787. After the purchase of the Louisiana territory, the situation became critical. The prospects of the cotton industry dazzled the southern planters, and made them determined to fight to the last ditch for the right to employ slave labour. Their whole social economy was based on it, for white labour was scarce and ill-adapted to cotton production Slavery *per se* was not widely condemned as an institution degrading to a young and vigorous republic. Opposition was largely of a different sort. As new territories were acquired and new states came into being, the free ones, being mainly commercial and capitalist, feared that they would be outvoted in the Senate by the southern states, since each state, large or small, had two representatives. Thus there grew up "a free soil party," whose ultimate aim was predominance in the councils of the State The controversy reached its peak in 1819. Of the 22 states in the Union 11 were free and 11 slave-owning The question at issue was whether the new Missouri State should be free or slave. Further ahead was another question. What social system should take shape in other regions of the Louisiana purchase and in territories yet to be acquired? The final settlement of these problems was for the future On the immediate issue compromise was still possible. In 1820 Maine was admitted into the Union as a free state and Missouri as a slave state. Latitude 36° 30′ N. divided the domains of slavery and freedom in the remainder of the Louisiana purchase Later on there were other makeshift arrangements Ultimately the issue was resolved by force of arms, but slavery was never a clear-cut issue. Geographical and economic circumstances created common interests between states with opposing views about the status of the Negro population

Meantime the movement westwards to the Pacific went on. In 1845 Texas was annexed. Already backwoodsmen, trappers and the like had followed trails across the Rockies. In their wake came settlers. The New England shipping interests had rounded the Horn to carry on trade between the west coast and China. Settlement followed in California In this vast area, including the Rockies and the eastern seaboard, the rival claims of the United States and Mexico clashed Rude and badly-governed, where neither property nor life was secure, Mexico had to be subdued as a condition of expansion, if America's destiny was to rule from ocean to ocean. By the Mexican concession of 1848 and a settlement with Britain with respect to the possession of Oregon and to the position of the Canadian boundary, the United States achieved this goal, though the bigger task of settling the vast lands which intervened between the great seas had to await the coming of the railway.

The drift of population and immigration was not wholly centrifugal. The settlement of the Pacific seaboard progressed rapidly, while there remained great empty spaces in the middle of the continent The end of the phase of territorial acquisition coincided with discovery of gold in California. Soon the country was seething with immigrants from all quarters, lured from peaceful and humdrum occupations by a prospect of fantastic riches. News spread to New York and eastwards to Europe. Numbers swelled to grotesque proportions In 1850 California had a population of 92,000.

Within ten years the figure had reached 380,000. The trail across the vast continent had perils that only the strongest could overcome. Thousands who set out for this El Dorado perished by the wayside. Many more who embarked with such high hope on the long sea voyage round the Horn or the shorter one by Panama or Mexico suffered terribly at the hands of scurvy, cholera and shipwreck.

THE SPREAD OF CAPITALISM

During the years of territorial expansion, America was on the march. North and south, in agriculture and in industry, the period before the Civil War saw momentous changes. Everywhere conditions favoured expansion. With limitless natural resources, a seemingly inexhaustible domestic market, a steadily increasing flow of immigrants, a crop of new inventions and a pioneer stock of restless and determined spirit, America moved on to industrialism. Steamers began to ply along the coast and on the great rivers Canals were cut and railways broke down the isolation of the interior. Banking and other financial institutions spun their web over the entire economic system. A fundamental transformation of economic and social life was sharpening the antagonism between the two civilizations of north and south.

At the time of the Declaration of Independence some of the colonists held that America's future lay in farming and that her market was within her own doors. There were soon others who knew that America would use and improve on inventions which were to reshape British industry. Before 1800 Samuel Slater, in England an employee of Arkwright, sailed to America where his services were at once enlisted to establish power-spinning. The first successful cotton factory in the United States started up in 1790. Shortly afterwards wool-carding machinery worked by water power came to disintegrate the primitive household industry. Soon there were other factories in the northern states. By 1810 there were 269 mills with 87,000 spindles. The Napoleonic Wars, which checked British commerce, and the war between Britain and America in 1812, stimulated American manufactures. From 31,000 in 1809 the number of cotton spindles rose to 500,000 in 1815. Industrialism spread from Maine to Chesapeake Bay, and the factory system secured a firm footing. The end of the war reopened trade and America was flooded with goods from Britain "It is worth while," said Brougham in the British Parliament, "to incur a loss upon the first exportation in order by a glut, to stifle in the cradle those rising manufactures in the United States which the War has forced into existence contrary to the natural course of things" (Fig. 34).

Imports rose from 13m dollars in 1813 to 147m dollars in 1816. The infant industries of the United States now passed through a severe testing time. At the height of the blizzard the numerous cotton mills of Rhode Island stood idle. In the wake of the sudden dumping of British goods came a depression, which destroyed enterprise and called a halt to industry on both sides of the Atlantic; but neither foreign competition nor domestic depression could permanently restrain forces pulling the United States

towards industrialism. Protected by distance as well as by tariffs, American manufacturers proceeded to build on the ruins of their early efforts. Americans themselves played a notable part in the history of technology and invention in the nineteenth century. Better and more adequate machinery was installed in the mills and the abundant water supply of the country was harnessed to the service of man To spinning was added power-weaving. Before the Civil War a great cotton manufacturing industry stretched from the northern coast line to the Great Lakes The following table shows how rapidly the industry grew *

COTTON MANUFACTURE

	1840	1850	1860
Mills	1,369	1,074	1,991
Spindles	2,284,631	3,398,000	5,235,727
Cotton consumed (in lbs)	118,500,000	272,527,000	422,690,000
Capital invested	$51,102,359	$76,032,578	$98,585,269
Value of product	$46,350,453	$65,501,687	$115,681,774

The iron industry prepared the way for the great Steel Age that followed the Civil War. The isolation of mining gave the employers a control over their workers that was not far removed from the control exercised by the planters over their slaves With an eye to the future, industrialists and speculators secured large holdings of land to work coal and ironstone. They housed their workers, provided shops, churches, schools and other services.

Before 1825 methods of iron production were primitive, and there was little concentration of the industry. Following successful experiments on anthracite smelting by Frederick W. Geissenhainer, it took a new turn in the thirties. Twenty years later the output of anthracite iron exceeded that of charcoal iron The hot blast process introduced from Scotland reduced costs and gave production a new impetus, but coke was not extensively used before the Civil War. By 1860 the output of pig-iron almost reached the 1m ton mark, but that was only about equal to the production of Scotland In the production of iron Pennsylvania soon surpassed all other states Stretching away to the Great Lakes a new industrial region of the United States was taking shape.

A swift drift towards industrialism is the chief characteristic of the northern states in the fifty years before the Civil War. There was a new grouping of social classes, a new outlook among the manufacturers and a rapid growth of town life The Census figures show that the value of domestic manufactures in the United States rose between 1840 and 1860 from 483m dollars to 1,885m The concentration of manufactures in the northern states shows up in the following table:†

* H J Carman, *Social and Economic History of the United States*, New York, 1934, ii, 444.

† Carman, ii, 20.

MANUFACTURING BY SECTIONS, 1860

Section	Number of Establishments	Capital Invested	Average number of labourers	Annual Value of Products
New England .	20,671	$257,477,783	391,836	$468,599,287
Middle States .	53,387	435,061,964	546,243	802,338,392
Western States .	36,785	194,212,543	209,909	384,606,530
Southern States .	20,631	95,975,185	110,721	155,531,281
Pacific States	8,777	23,380,334	50,204	71,229,989
Territories . ..	282	3,747,906	2,333	3,556,197
Total .	140,533	$1,009,855,715	1,311,246	$1,885,861,676

The next table shows that what was true of Britain was true of America. The growth of towns proceeded *pari passu* with industrialism:*

GROWTH OF POPULATION, 1800–60

City	1800	1840	1860
New York	60,510	312,710	813,669
Philadelphia	41,220	93,665	565,529
Baltimore	26,514	102,313	212,418
Boston	24,937	93,383	177,840
Pittsburgh	1,565	31,204	77,923
Cincinnati	—	46,338	161,044
St. Louis	—	16,469	160,773
Chicago	—	4,470	109,260
Louisville	359	21,210	68,033
Buffalo	—	18,213	81,129

A change of the centre of gravity during this period was not due to any decline of the economic importance of the southern states. The economy of the south was also the target of technical and commercial forces The cotton "gin" invented by Whitney in 1792 was effecting a change no less fundamental than that which accompanied the introduction of power-driven machinery in the north. The *gin* solved the problem of the economical separation of the seed from the cotton. It had been a slow laborious hand process, and the output of the slave was but one pound per day The earliest *gin* increased the output of the slave to fifty pounds per day. When it was harnessed to steam power output jumped to one thousand pounds a day.

The new invention came at an opportune moment. Across the Atlantic the cotton industry of Lancashire and Scotland was daily increasing as power-driven machinery replaced the older spinning wheels With the help of the cotton gin the southern states were able to become the principal

* Carman, ii, 64

source of supplies. The growing manufacturing industry of the north increased the demand. Small wonder that cotton became the largest crop of the south, and the largest single export of the United States Between 1810 and 1860 output increased from 85m lb to 2,300m lb., and export from 93m lb. to 1,767m lb From the seaboard of South Carolina and Georgia the cultivation of cotton moved eastwards, first to the uplands then to the valley of the Mississippi. The methods of production involved reckless cropping of the soil. So planters were continually on the move to pastures new, leaving behind them a desolate waste where the land had once been fertile and kind To the old south (Maryland to Georgia) was added a new south stretching from Florida in the west to Texas in the east, and bounded on the north by Kentucky and Missouri. New Orleans and Mobile on the Gulf of Mexico took the place of Charleston and Savannah.

This immense extension of the planting area strengthened the slave interest in America. The prosperity of the southern *Herrenvolk* depended on the great staples, cotton, rice, sugar and tobacco; and a benevolent dispensation of Providence had provided them with an abundant labour supply The following table shows how the negro population of the southern states grew* (Figs 33 and 35)

State	1810	1840	1860
Maryland	145,000	151,000	171,000
Virginia	423,000	499,000	549,000
North Carolina	179,000	268,000	361,000
South Carolina	200,000	335,000	412,000
Georgia	107,000	283,000	465,000
Florida	—	26,000	62,000
Alabama	—	255,000	437,000
Mississippi	17,000	196,000	437,000
Louisiana	42,000	193,000	350,000
Texas	—	—	183,000
Arkansas	—	20,000	111,000
Tennessee	45,000	188,000	283,000
Kentucky	82,000	189,000	236,000
Missouri	4,000	59,000	118,000

Face to face with a powerful group of manufacturers and merchants of the north there was thus an equally powerful group of slave-owners in the south. In both regions those whose influence mattered were relatively few. In 1861 those of the north numbered 460,000 (income-tax payers); and in the south there were 350,000 slave-owners. The output of domestic manufactures, including mines and fisheries, doubled in the decade before Lincoln's election. Meanwhile the value of the great staples of the south increased by less than 25 per cent. In 1859 the former was valued at 1,900m dollars and the latter at 204m dollars. Economic forces beyond the control

* Carman, ii, 394.

*

of any individual were drawing America swiftly towards industrialism. In the north there was no labour shortage, for every ship brought hundreds of emigrants from the old world Between 1820 and 1860 the flow of Europeans to the United States became a deluge:

1821–1830	151,824	1841–1850	1,713,251
1831–1840	599,125	1851–1860	2,598,214

"When Lincoln was inaugurated," say Charles and Mary Beard, "the capital invested in industries, railways, commerce, and city property exceeded in dollars and cents the value of all the farms and plantations between the Atlantic and the Pacific—a fact announcing at last the triumph of industry over agriculture. The iron, boots, shoes, and leather goods that poured annually from the northern mills alone surpassed in selling price all the cotton grown in southern fields."

COMMUNICATIONS

A shift of the centre of gravity of the United States was made inevitable by improvements of communications At first steam transport proceeded along the old routes On both sides of a formidable mountain barrier, sea and river transport predominated Except the Hudson, the rivers that emptied themselves into the Atlantic were too fast-flowing to serve the needs of commerce. So industry was at first confined to the coastline and inter-state trade took mostly to the sea West of the Appalachian Mountains, in the immense plain of central America, rivers served well enough The great Mississippi with its myriad tributaries, the Ohio and other natural waterways awaited man's use, but it was not all plain sailing. Shoals and curves, rocks and currents, offered deadly obstacles to the intrepid bargeman. Trade still flowed north and south, when Fulton sailed his steamer—the *Claremont*—on the Hudson River in 1807. By 1820 there were no less than 60 steamers plying for trade on the Mississippi. Their number increased to 400 in 1840 and to over 1,000 in 1860. From Kentucky and Tennessee, Missouri and Kansas, the great staples of tobacco and cotton now floated down to New Orleans From farther north in Ohio, manufactured goods followed the same route to serve the needs of the cotton-growing population of the south.

The great trunk canals threatened the old lines of communication and strengthened the growing supremacy of the north-east states. Of these new arteries of commerce the Erie Canal, opened in 1825, was the first. Before this canals had been short, and had served local needs. The Erie Canal was 363 miles long It cost between 7m and 8m dollars, and was able to serve the State of New York. By joining the Hudson River to Buffalo it offered a water thoroughfare from Lake Erie to New York City. The cost of transport fell immediately from 100 to between 10 and 8 dollars a ton, the time of transit from 20 to 6 days Seemingly New York was now to draw to itself all the commerce of the north-west and north-east, but Philadelphia was not to be outdone. Plans were afoot to link Philadelphia to Pittsburgh, first by canal and where that was impossible by railroad. In the mountains between, where locks were out of the question, barges were

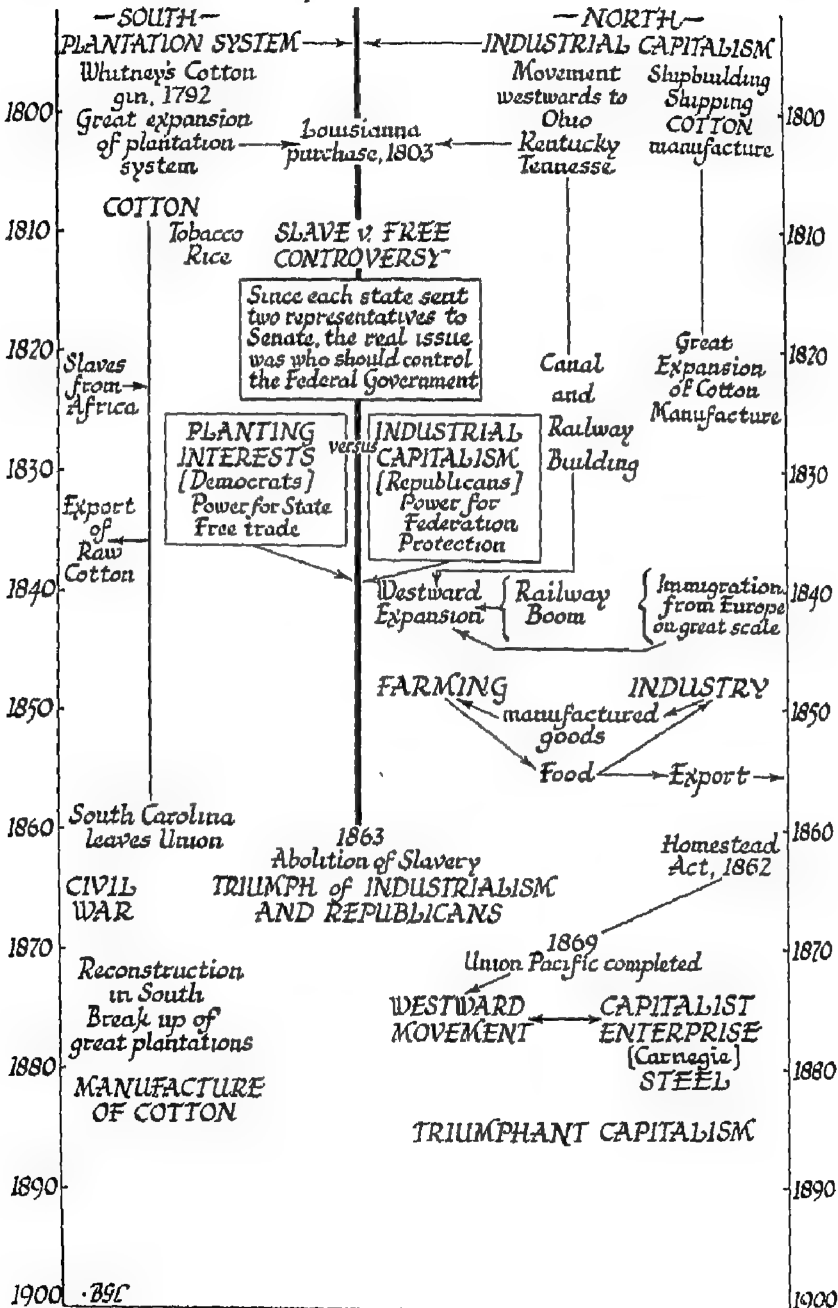
transferred to railway trucks and pulled up by a stationary engine. Soon a network of canals spread over Ohio, Pennsylvania and the north-west, providing easy transit between the Great Lakes and the Atlantic seaboard. These trunk and branch canals brought the vast resources of the north-west and middle-west into the economic system of the north-east

Not long after the first barge sailed through the Erie Canal, another and more powerful means of communication forged still closer the economic bonds of the middle-west and Atlantic States. The building of the Baltimore and Ohio railroad began in 1828. By 1840 there were 2,818 miles of railway radiating from New York, Philadelphia, Boston and Baltimore. By the eve of the Civil War this had increased to 30,000 miles. A network of lines spread over the northern and north-west states released resources which were destined to make their impact felt far afield, challenging the complacent prosperity of British farming, and bringing to the British housewife the cheap loaf. Along the iron roads passed the produce of rich agricultural lands—wheat, bacon, meat. Westwards drifted a never-ending stream of emigrants, enticed to a land of promise both by the railway companies and by the State. Villages which had been sleepy hamlets or clusters of log cabins grew overnight into great marketing towns or centres of manufacturing industries · Detroit, Cleveland, Pittsburgh, Cincinnati, Chicago and a host of others. Before the days of canals and railroads trade had moved southwards from the Great Lakes to New Orleans The main lines of communication now ran east and west. Meantime, S. F. B. Morse, a native American, had fashioned a new instrument in the service of railway development. Telegraphy linked the markets of Chicago and New York.

Long before the Civil War economic power was thus concentrating in the north, where industrial capitalism was firmly established with its immense potentialities for good and evil The social leader was the industrialist, an employer of free labour and a staunch supporter of protection. As railways branched out this way and that, bringing within the same system the wheat fields and the factories, the cash nexus and the profit motive became the mainspring of endeavour. Banking and credit facilities arose to meet new circumstances. With headquarters in the cities of the east, they spread tentacles over north and south alike. New York bankers became the custodians of the fortunes of the planters no less than of those of the farmer on the prairies or the manufacturers in the towns Enriched by trade, by manufacture or by real estate, a new and influential class emerged to challenge the power of the slave-owners and champions of free trade. Two political parties came into being The Republicans stood for the supremacy of the federation, the Democrats for the supremacy of the individual State The outcome was inevitable. New means of communication were destroying the isolation of the State and strengthening the authority of the Republic (Figs. 36 and 37).

THE FINAL CLASH

Within the two major groups in the United States were many sectional interests The aspirations of the farmers of the north were not necessarily all identical with those of the large industrialists of the towns, nor did the



TIME CHART 11. THE TRIUMPH OF INDUSTRIALISM

sugar and hemp interests of Virginia and Maryland agree with the southern cotton planters about free trade. None the less, there was a deep cleavage between north and south Viewed from the standpoint of national development, the southern states were inferior to the northern, to whose financial system they were bound. They depended on foreign markets for the sale of their staple crops. They sold their produce through a factory system which often involved the planters in overproduction and an intolerable burden of debt. What manufactured goods they required passed through many hands and were subject to tariff dues, enriching the coffers of the Federal State and providing funds to subsidize the fishing and shipping interests of the north Some hoped that the balance could be rectified by establishing manufacturing industries in the south. The trade statistics of 1860 do not show that this policy achieved success. In that year the south contributed a mere 8 per cent to the country's 1,886m dollars of manufactures. Some advocated railway building, and indeed there was ample extension of railroads by Virginia, the Carolinas, Georgia, Louisiana and Mississippi. There was a plan to run a railway from New Orleans along the Mississippi Valley to the Great Lakes, in order to tap the wealth of the north and check the eastward movement of produce. It was a bold scheme; but it came too late. By 1860 there were about 8,000 miles of line between Ohio and the Gulf of Mexico, but already the roads of iron had firmly welded the upper Mississippi Valley to New York, Philadelphia and Baltimore

The slavery issue brought matters to a head and united the various sectional interests in each region. The north attacked slavery. The plantation states rallied to the defence of a system that was congenial to their pockets and to their highly publicized old-world courtesy. In 1807 the Federal Government prohibited the importation of slaves; but already slavery was disappearing in the states north of the Delaware River. In the south it continued, though not everywhere. In West Virginia, Maryland and North Carolina the emigration of white settlers conspired with differences in soil and climate to confine slavery to certain regions. Some Americans believed at the time that slavery was on the wane, that emancipation was a foregone conclusion. To others, it was far from inevitable. Following the adoption and improvement of Whitney's gin, a great expansion of cotton planting for expanding markets in Europe and in the northern states had consolidated the system of slave-ownership; and ruthless treatment of the soil had made extension of the area devoted to cotton imperative to the owners themselves Planters looked to the Mississippi and beyond to satisfy their demands. Westward movement thus became a struggle between planters intent on extending the area of slave employment and northern manufacturers or farmers whose demands for labour were easily satisfied by the great inflow of people from the Old World.

The Missouri Compromise of 1820 was one stage in the conflict. By the middle of the century the planters had established themselves so firmly that the abolition of slavery seemed farther than ever away; but a day of reckoning was at hand. Expansion westwards had its limits. Beyond Texas fertile plains suitable for cotton growing came to an end. Without use of fertilizers and careful husbanding of land resources, without also a more

efficient and more balanced economy, crisis was inescapable. "The irrepressible conflict between opposing and enduring forces was in sight." In December 1860 South Carolina seceded from the Union. Within two months Mississippi, Florida, Georgia, Alabama and Louisiana had followed suit. Soon Texas, Virginia, North Carolina, Tennessee and Arkansas joined them. War followed, war in which success of the northern states was assured from the outset. They had great resources of materials and of manpower. They had also a fleet capable of blockading the southern ports. The south was badly organized. Its transport system was soon disordered, its economic life disrupted; and the north was able to capitalize its moral professions, the abolition of slavery, decreed in 1863. Though slavery was the battle-cry, the issues at stake involved the survival of an economy which sought to use federal political power for its own ends in defiance of the aspirations and established practices of capitalism.

WESTWARD MOVEMENT

A tremendous speeding up of the economic and social processes which we have already discussed followed the Civil War. The freeing of the slaves had been a great moral victory for the north. The opposition of the south had been crushed The new steam transport had set the stage for the grand climax of American development Though on the west coast California was crowded with speculators and all manner of people anxious to get rich quickly, the Mississippi valley was the western boundary. Northwards, over the great plains and the slopes of the Rockies, Texas cowboys herded their innumerable cattle unchecked by fence or boundary. Between the outpost states of Missouri and Arkansas and the populated fringe of the east coast in 1860 there lay a vast area, almost equal in extent to all the existing states, with every variety of soil, climate and geological formation. To the north lay soil fit for the plough, westwards incomparable pasture for stock raising, lumber lands in abundance, and beneath the surface unknown reservoirs of minerals and oil

In the last forty years of the century there was a mass attack on these enormous uncharted regions. A first condition for successful exploitation was the extension of the railways to the Rockies and beyond them to the Pacific Coast. The completion of the first transcontinental telegraph line to San Francisco was the tocsin of national unification. For many years far-seeing Americans had discussed the possibility of a transcontinental railway, but rival interests of north and south made agreement about the route impossible. In 1862 the Republicans had control of the federal government. Choice fell on the northern route, which suited the interests of manufacturers and farmers alike. Legislative steps were at once taken to help private enterprise to carry the plan into effect The Union Pacific Railway Company was authorized to build a line west from Omaha on the border of Nebraska, through Wyoming, Utah and Nevada to the eastern boundary of California. The Central Pacific, organized by a business group in Sacramento, was to complete the line to the coast. Both concerns were given a 400-foot right of way across the public domain, free building materials, grants of land of

10 square miles in alternate sections for every mile constructed, and loans ranging from 16,000 to 48,000 dollars a mile secured on the completed railway In effect, the Government made the companies a gift of 20m acres of land and 61m dollars in government bonds.

The task of construction was gigantic, especially at the western end where mountain barriers had to be overcome. Thousands of Chinese coolies were employed on this section, while the Union Pacific Company enlisted the services of Irish immigrants On May 10, 1869, the two lines met fifty miles west of Ogden in Utah. Meantime the railway from Chicago had reached Omaha, the western terminus of the Union Pacific, thus completing a through-system from east to west. The achievement evoked tremendous enthusiasm. Instead of the long and perilous voyage round the Horn, the railway now offered direct communication between the manufacturing east and the Far West. Even China was now brought within reach of the American economic system.

"The drills and sheetings of Connecticut, Rhode Island, and Massachusetts and other manufactures of the United States," declared a distinguished merchant, "may be transported to China in thirty days; and the teas and rich silks of China, in exchange, come back to New Orleans, to Charleston, to Washington, to Baltimore, to Philadelphia, New York and Boston in thirty days more."*

By the mid-eighties other trunk lines stretched across the continent. In the north there was the Northern Pacific from Duluth on Lake Superior to Tacoma in Washington In the south there was the South Pacific between New Orleans and San Francisco Besides these there were innumerable lines which acted as feeders to the great trunk lines. The vast network of railways which thus spread over the continent had consequences of the first magnitude. Politically they facilitated the final unification of the United States. As communications reached westwards to the Pacific one state after another came into the Union. With the aid of the telegraph and postal services, administration became possible throughout the continent. Economically, the railways were no less important. Huge grants of land received by the companies gave them a vested interest in immigration and in settlement. By advertisement and by the employment of agents in the eastern states as well as in the Old World, they conducted a gigantic campaign to secure settlers The limitless advantages of the new lands as compared with the old states and old countries were vividly brought before the notice of old and young alike. Schemes for settlement were prepared and even towns were planned on paper, close to the great railways which were to reap benefit from their peopling.

The Government itself helped. By the Homestead Act of 1862, Congress offered free farms of 160 acres to any adult citizen or alien who had filed the necessary papers. In the course of the next twenty years over 50m acres thus passed from the public domain to private hands Meantime speculators were busy acquiring real estate by purchase or by fraud Capitalists from Britain eagerly interested themselves in land values, and many large estates were acquired by noble families and syndicates. According to Charles and

* C and M. Beard, ii, 129.

Mary Beard, approximately 20m acres had passed into alien hands by 1884. The Duke of Sutherland possessed nearly half a million acres of American soil; Lord Dunraven had 60,000; and one English syndicate, headed by the Marquis of Tweeddale, had more than 1½m acres Two other English syndicates had over 7m acres in Texas alone. To be sure one object of the Homestead Act had been to check the acquisition by companies or individuals of large estates for speculative purposes; but this object was never achieved. For those who cared to do so and had the means, it was easy to acquire large estates Farms of 20,000 to 70,000 acres were not unknown, and some estates covered as much as 335,000 acres. A system of absentee landlordism and occupying tenants was common in the Far West. In some places something like the plantation system of the south prevailed. Chinese and Mexican labourers were employed in large numbers.

Throughout the period of railway construction and land appropriation, immigrants were pouring into the United States, crowding the old eastern and north-eastern states and overflowing into the Middle and Far West. Between 1860 and 1900 the density of the population rose from 10·6 to 25 6 per square mile. In New York State it rose from 81·4 to 152·5, in Pennsylvania from 64·8 to 140·6; in Rhode Island from 163 7 to 401·6; and in Illinois from 30 6 to 86·1. Beyond the Mississippi westwards to the Rockies and northwards to the Canadian frontier population moved in a never-ending stream. Within twenty years the population of Kansas rose from 100,000 to 1m. Nebraska's 28,000 increased to almost ½m between 1860 and 1880. From the Scandinavian countries thousands of emigrants came to the fertile lands of Minnesota, Wisconsin and the Dakotas.

Obstacles to the great westward movement of population were ruthlessly overcome By a series of punitive expeditions and by purchase, the Indians were ousted from the territory assigned to them at an earlier time. White settlers were soon rushing to peg out claims in the rich lands they vacated. Texas cattle dealers were soon to lose their undisputed right to herd their cattle over the eastern slopes of the Rockies, an area equal to more than one-third of the United States. The freedom of the cowboy with his pistol, his lasso and his broad hat, spending long days in the saddle, living recklessly and dangerously between Texas and the Canadian frontier, was incompatible with western expansion of cultivation, sheep rearing and scientific breeding. Railways cut across his paths and the fences of homesteaders limited his freedom. Gradually the great drive northwards from Texas was checked and wild grazing confined to the forests and the public reserves. In 1906 graziers were forced to pay for their privileges on the public domain; but the cattle trade did not decay. It increased, but its organization had changed. In 1880 there were 27m beef cattle in the United States. By 1900 this figure had been almost doubled. Cattle raising had become a highly capitalized business.

THE EXPANSION OF AGRICULTURE

The agrarian changes that accompanied and followed railway development and the westward drift of population were no less profound than the industrial developments which were in full swing in the eastern states. As

settlers spread over the land, the area of cultivation extended enormously. In the fifty years following 1860 the number of farms increased more than threefold. The new lands brought into cultivation covered over 300m acres, and the output of wheat rose from 173m bushels to nearly 700m bushels Such a vast increase of the produce of the land could not but have profound effects far beyond the boundaries of the Middle West. It also ministered to industrial expansion in the east. The new lands supplied food to teeming multitudes of the towns and raw material for the canning industry of Cincinnati and Chicago. They also provided a market for the produce of mill, mine and factory.

Expansion of farming was indispensable to and interlocked with the development of industrialism in the United States. Enclosure of grazing land was made possible by cheap iron wire and offered an expanding market for it. As farm produce flowed eastward, it brought revenue to railway companies. The great steel inventions reduced operating costs, and a phenomenal fall in freights made possible economical marketing of wheat and other products of the land The life of steel rails was about three times that of iron, and by 1890 eight-tenths of the rails in the U.S A. were steel. Larger trucks and more powerful locomotives were now possible, and train loads increased from an average of 177·42 tons in 1890 to 270·86 tons in 1900 and to 362·57 tons in 1909. Agriculture also benefited from improvement of sea transport through the adoption of steel and the marine engine In the last quarter of the century the wheat fields of the U S.A. had effects on European life no less profound than those produced by the flow of gold and silver from the New World to the Old during the sixteenth century. Export of wheat rose from 17m bushels in 1860 to well over 200m bushels in 1900. In England the price of wheat fell from 56s. 8d in 1871 to 22s. 10d. a quarter in 1894. Railways and steamers had so lowered freights that British farmers were no longer protected by distance. There was hardly a farm in Europe which did not feel the blast of American capitalism.

Employment of fertilizers, of machinery and other equipment that became necessary after the first easy and reckless onslaught on virgin lands, gave scope to the man with money As the century drew to its close American agriculture absorbed more and more capital. Before the Civil War had run its course, introduction of a primitive binder pointed the way to widespread use of agricultural machinery. A combined reaper and binder followed in the seventies and eighties. It was soon made entirely automatic On the great farms of the Far West all the processes of reaping, binding, threshing and bagging were brought within the scope of one plant At first the motive power was steam. Then came the internal combustion engine to rescue farming operations from animal, wind, water and steam power alike. Machinery received a new impetus. Besides reapers, which were the chief concern of numerous firms which combined to form the International Harvester Company in 1902, there were numberless other improved devices and tools. The chilled steel plough adapted for a variety of uses, durable and cheap harrows, seed drills and potato diggers, to mention but a few products of the inventor's art, revolutionized farming methods as the water frame, the steam engine and the steel inventions had revolutionized the production of manufactured goods

The ideal of American policy had been to create a multitude of small owners; but the new drift favoured tenant farming. In 1880, 25 per cent of the farms in the United States were in the hands of tenant farmers; by the beginning of the twentieth century this figure had increased to 35 per cent. As one generation succeeded another more and more land changed hands and the number of tenant farmers grew. Many small owners were owners only by courtesy, because their lands were heavily mortgaged. "In 1910," say Charles and Mary Beard, "the burden of farm mortgages stood at 1,700m dollars; within another decade it leaped to more than four billions, a sum almost equal to the value of all the farm property in America seventy years before." As they had copied the methods of modern technology and science, the farmers emulated the social procedures of industrial capitalists. They formed associations to control prices and output The country was soon buzzing with associations based on special products A national organization was coming to birth.

RECONSTRUCTION IN THE SOUTH

The Civil War left the South broken and disorganized. Great estates came on the market. Their owners pocketed whatever they could get and went northwards to the industrial towns Some sold half their property and husbanded the remainder. In their new-won freedom the slaves suffered from the suddenness with which their chains had been severed. It had come at a time of general disaster in their immediate surroundings. Some remained as wage-earners to their former masters. Others took service with new employers. Some turned to the towns. Others took small holdings of their own to work on "the cropping system." The proprietor supplied the capital, the tenant the labour, and the produce was divided in agreed proportions between both parties. Thus thousands of freed men continued to grow cotton in which they had some skill. The poor whites seized the opportunity to take holdings where they were their own masters. So the reconstruction of the south after the abolition of slavery involved the break-up of the great plantations and the increase in the number of tenant farmers. In 1870 Tennessee, for instance, had 118,141 farms against only 82,368 in 1860 In South Carolina the number rose from about 33,000 to 52,000; in Mississippi from 43,000 to 68,000; and in Louisiana from 17,000 to 28,000 * As the south settled down to the new system the output of cotton rose steeply. In 1875 the acreage devoted to cotton was 8,810,000, by 1926 it had increased to 47m acres. Meantime the manufacture of cotton made headway In 1860 there were only 324,000 spindles in the south; by 1900 this had increased to 4,368,000, and by 1930 to 18,586,000. In the last-named year slightly more than half the spindles in the U.S.A. were found in the south (Fig. 38 and 39)

TRIUMPHANT INDUSTRIALISM

There has been nothing in history so overwhelming, so spectacular, so swift in its action and so drastic in its social consequences as the development

* Carman, *Social and Econ. Hist. of the United States* ii, 589.

of industrialism in the United States. In the space of little more than thirty years the United States passed through a stage in economic development which had occupied about a hundred years in Britain In its early railway age America imported capital goods from Britain. By the close of the century it had become the greatest producer of steel in the world. The story of this astonishing phase in American history would occupy a volume in itself. Here we must content ourselves with a brief account of the outstanding characteristics of the period.

When the American Civil War came to an end the stage was already set. The once-powerful planting interests had capitulated Capitalism, enriched and strengthened during the war years, controlled the State machine. There were no obstacles in its path. America had no landed aristocracy to check railway building and levy annual tribute on minerals. On the contrary, the State was the largest landowner. In 1860 it owned one-half of the whole area of the country, and it was a good friend to capitalist enterprise, willing to give away land for a trifle, ready to condone fraud and little disposed to scrutinize too closely the land titles of its patrons and supporters These lands, so easily secured by political manipulation and sharp practice, contained valuable resources of minerals, of oil and of lumber. Eager labour passed the frontier without restraint, and the legislature erected tariff barriers to protect the home market for American industry In no other country were conditions so fantastically favourable for capitalist development.

One may well condemn such manipulation of government in the interests of a class, but the achievements of the age silenced criticism or condemnation There is an epic of enterprise, endeavour, of the application of science to production and distribution in Andrew Carnegie's bold statement. "Two pounds of ironstone mined upon Lake Superior and transported nine hundred miles to Pittsburgh, one pound and one-half of coal, mined and manufactured into coke, and transported to Pittsburgh; one half pound of lime, mined and transported to Pittsburgh, a small amount of manganese ore mined in Virginia and brought to Pittsburgh—and these four pounds of materials manufactured into one pound of steel, for which the consumer pays one cent." The figures of production are of bewildering magnitude. In 1860 the value of capital invested in manufacturing industries stood at 1,010m dollars, and the number of wage-earners at 1,311,246. In 1915 capital had increased to 22,791m dollars and wage-earners to 7,036,337. During the same period the value of products had risen from 1,886m dollars to 24,246m dollars.* In 1870 the United States production of pig iron was one-third of that of the United Kingdom. In the year before the World War it was 30 97m tons as against the United Kingdom's 10·26m tons By 1923 it had jumped to 40·36m tons Steel production rose from a negligible figure in 1870 to 31m tons in 1913, and to 48m tons in 1926, then slightly more than half the total world production. Small wonder that the United States has been held up as an example of the merits of capitalism, or that Americans were so generally convinced of its beneficence before the crisis of 1929.

* *Economic Development of the United States*, by Isaac Lippincott, New York, 1922, 417.

Amidst the numerous personalities of American business life, a few stand out as giants of this remarkable age. Their names are household words the world over—William Vanderbilt (*railways*), John D. Rockefeller (*oil*), Andrew Carnegie (*steel*), J. Pierpont Morgan (*finance*), Philip D. Armour (*beef and pork*). Their achievements are of truly historic magnitude. For, despite the ruthlessness with which they pursued their ends, and the corruption which tainted their hands, they created gigantic organizations by exploiting the most up-to-date scientific knowledge. They stood for dictatorship in industry, but also for efficiency against the waste of petty competition, for widespread organization of material resources against small local and provincial concerns. To further their ends, they used the press, the law and every social agency which they could bring under their power. They removed ruthlessly whatever or whoever stood in their way. They carried on warfare with rival concerns until their opponents were compelled to capitulate. Every year witnessed the growth of ever wider organization, dominated and controlled by a master mind ambition pursuing with singleness of purpose more capital, more employees and more output. Most of the great figures started on the lowest rung of the ladder. Carnegie began work in a cotton mill. Rockefeller was a book-keeper. Armour worked on his father's farm. All followed the same route from individual enterprise to partnership, from partnership to corporation, from corporation to combine.

Before the end of the Civil War, Andrew Carnegie's interest in railways and his appreciation of the vital part they would play in American economic life both for transport and as a market for iron and steel, turned his attention to bridge building and iron production. In 1864 he founded a company for the manufacture of iron rails and two years later established the Pittsburgh Locomotive Works "Thirty-three and an income of 50,000 dollars per annum! By this time two years I can arrange all my business as to secure at least 50,000 dollars per annum. Beyond this never earn—make no effort to increase fortune, but spend the surplus each year for benevolent purposes. Cast aside business for ever, except for others," he wrote in 1868 * Caught up in the maelstrom of business and profit-making, Carnegie did not retire. The age of steel was at hand; and its prospects were too alluring to a Scot. After meeting Bessemer and Sir Lothian Bell in England, he returned to America enthusiastic about the new alloy which all experiments proved to be more durable than iron and therefore more suitable for rails. His partners in iron were not so enthusiastic. Carnegie, therefore, invited new ones to form a company. The Edgar Thomson Steel Works started in 1875. Once success was assured, he set about amalgamating his various interests and absorbing rival concerns in the Pittsburgh district. In 1881 he founded Carnegie Brothers & Co., the largest steel concern in the States, with a capital of 5m dollars. Of this he himself possessed 2,721,000 dollars. In 1892 the absorption of rival concerns made it necessary to float a new organization called the Carnegie Steel Company with a capital of 25m dollars

Before the close of the century the Carnegie Steel Company had become a mammoth concern. It owned enormous resources of coal, and on Lake Superior it controlled the largest beds of ore ever discovered On the Lake

* *The Life of Andrew Carnegie,* by Burton J. Hendrick, 1933, 127.

itself, it had its own ships to convey these riches to Lake Erie ports. It had its own railway to send them thence. The art of business management married the economies of efficient organization to the application of the latest discoveries of chemist and engineer. In 1900 its output of steel was 4m tons, almost as much as the total output of the United Kingdom. "Three pounds for two cents" was the Carnegie quotation for steel. Rails selling for 160 dollars in 1875 sold in 1898 at 17 dollars. At the time of the Civil War America still lived in an age of wood and iron. Before the close of the century she was already in the age of steel, for the steel master himself an age of gold. In 1896 the annual profits of the Carnegie Company were 6m dollars, in 1897, 7m dollars, in 1898, 11,500,000 dollars, in 1899, 21m dollars and in 1900, 40m dollars. Of the latter figure Carnegie's share was 25m dollars.* The wealth created by his genius, by the labour of his workers and by the skill of his experts has brought great benefits to universities, to the reading public, to youth and to students in his native country.

Amalgamation and combination proceeded apace in other centres of the steel industry—in Alabama, Colorado and Illinois The Illinois Steel Company, created in 1889 with a capital of 25m dollars, was a merger of various steel companies in the Chicago district. In the closing years of the century the forces were massing for a final consummation. The United Steel Company came into being in 1901. It bought out the Carnegie Company's interest in the steel industry for 492m dollars When the final scheme was complete it had acquired vast resources of coal, iron and limestone It owned 112 steamers, 1,000 miles of railway and almost 50 per cent of the steel capacity of the country (Fig. 40)

Rockefeller's rise to fame was also meteoric Starting in 1862 with an interest in a Cleveland oil refinery, he founded an oil concern of his own three years later In 1870, along with others, he organized the Standard Oil Company of Ohio, which proceeded to acquire control of most of the refineries in Cleveland By means of preferential railway rates, his group compelled competitors to join or close down. From Cleveland, the Standard Oil Company extended its control to refineries in New York, Pennsylvania, Ohio and elsewhere. In 1882 the Standard Oil Trust came into being with Rockefeller himself at the head of it and holding dominion over 80 per cent of the business of producing, shipping, refining and selling petroleum and its products.†

One great industry after another copied the methods of steel and oil—large-scale production, amalgamation and monopoly. Isolated establishments under the ownership and control of individual employers passed into companies and companies into gigantic combines. The appearance of these great corporations signifies an important change in the ownership and direction of business Effective control now passed from the men who built up the business to financiers In the earlier stage of industrial enterprise, the individual who had created the business was generally the head, controlling its policy and directing its activities. Extensions to plant were financed from profits and local sources, so the business grew till it assumed

* Hendrick, *Life of Andrew Carnegie*, 423.

† See *The Trust Problem*, by J. W. Jenks and W. E. Clark, 1925

nation-wide proportions with financial requirements which could be met only by large banking institutions. The latter now came to take a lively interest in management, organization and policy, and lust for power led financiers to promote the movement towards combination. It is significant of the times that Morgan, the New York banker, was the leading figure in the creation of the great United Steel Corporation. It was he who finally clinched the bargain with Carnegie. He played a prominent part in the creation of the International Harvester Company and many lesser combines. At the height of his power Morgan had many giant banks under his control and over ten billions of capital invested in railway and industrial corporations. Along with Rockefeller, the Oil King, he had brought under his sovereignty a network of enterprises constituting "the heart of the business and commercial life of the nation." In this setting Wall Street became the nerve centre of American civilization. Fortunes were made and unmade by manipulation of securities Business was held in fee by the great financial houses without whose permission credit was unobtainable. New issues of shares could be made only with the sanction of the banks who themselves held large wads of industrial stock. The Stock Exchange crash of 1929 revealed how highly concentrated and also how vulnerable the structure had become. "America the Golden" had solved the problems of cheap production. Americans, for the most part, believed that capitalism had also solved the problem of distribution by adopting the hire purchase system.

THE NEW MIDDLE CLASS

As machinery replaced labour, as invention followed invention with bewildering rapidity, and as scientific discovery was harnessed to the service of man, a growing proportion of the nation was enlisted in the expert work of managing and directing industrial processes, in general administration, in advertising, in selling the myriad products of industry, in professional services, in banking, insurance, accounting and law which keep the productive machine in good heart, in technical operations and in education, health and public services, demanded by a more mature and more exacting population. The increase of this new middle class is one of the significant features of modern times In his book *Insurgent America*, Mr. Bingham gives the following table showing the percentages of the gainfully employed in the United States between 1890 and 1930:

	1890	1900	1910	1920	1930
Professional workers .	4·2	4·1	4·6	5·4	6·9
Proprietors, managers and officials (exc. farmers)	4·8	5·3	6·5	6·7	7·5
White-collar workers ..	5·5	7·2	9·7	13·1	15·3
Skilled labour .	—	—	19·5	20·7	20·9
Semi-skilled labour ..	53·0	55·2	11·9	14·5	13·2
Unskilled labour .. .	—	—	22·8	19·6	20·3
Farming population	32·4	28·2	25·0	20·1	16·0

This new middle class is closely identified with the capitalist order, partly because of the social atmosphere which surrounds it, partly because its savings give it an interest in the protection of property rights. The "black-coated worker," the technician or the professional man invests his surplus through his banker or stock broker. His individual holding may be quite small but it makes him feel that he is "a man of property," and that his interests are more closely bound up with those of the rich man than with those of the wage-earner who saves little if at all He craves for security and identifies security with the maintenance of the *status quo*. Labour disputes, or proposals for a drastic reorganization of industry, which bear the taint of socialism alarm him, by changes threatening the stability of the life he prizes and the opportunities for social advancement which the existing order offers him. Yet the interests of this class do not wholly coincide with those of the wealthy. It becomes restive under a policy which restricts output. It groans under the burden of taxation, national and local, spent to maintain an army of unemployed and to patch up the health of people inadequately paid and over-worked. The technician knows too well the enormous productive capacity of industry and is liable to be shocked at the folly of failing to utilize it to the full.

In America class distinctions are not so sharply defined as in the old world. The nature of the country, the absence of age-long social customs, the variety of its population, the educational system, the pioneer tradition, all combine to create an atmosphere of greater freedom and equality. Modern technology and science have brought their fruits into every household and therewith a uniformity of habits and modes of thought. The radio, the motor car, the telephone, electrical appliances in the home, and countless other inventions of the new age have broken down isolation and have blurred social distinctions. They have made daily life more mobile and in many ways more adventurous By 1925 there were over 20m cars in the United States, one to nearly every other family. There were more than 15m telephones and at least 3m radios.

None the less, income differences are big and show no tendency to diminish. Between 1914 and 1919 the number of taxpayers in the group 30,000 to 40,000 dollars a year increased from 6,000 to 15,400, and the number in the group 50,000 to 100,000 rose from 5,000 to 13,000. At the end of the World War there were 42,554 millionaires in America (30,000 dollars a year or more). These were exceptional years, but in the post-war years the wealthy became wealthier. In 1925, for instance, the income of private persons from rent, interest and dividends rose sharply from 5,900m to 8,200m. The old plutocracy now in its second generation, educated at exclusive schools and colleges which American wealth had founded, was reinforced by a new rich class. Below them on the income scale was the rapidly growing middle class which in 1919 numbered over 4m persons. The lowest income group, the wage-earners, still make up more than half the population.

In the autumn of 1929 a creation which had placed plenty seemingly within the grasp of everyone, broke down, and the physic of the economic doctors has not yet been able to revive it. Industrial production, which had

reached record figures in that year, fell by one-fifth in less than twelve months. In July 1931 it had dropped to two-thirds, and in midsummer of 1932 it was actually less than one-half of what it had been three years before. Common stock, which had soared in September 1929 to 225 per cent of the 1926 figure, fell within three years to 34 per cent of its value. Unemployment rose from 3,210,000 at the beginning of 1930 to 7,160,000 in 1931, to 10,197,000 in 1932 and to 12,986,000 in July 1933. Capitalism had reached a crisis. There was no immediate hope of recovery. So serious was the situation that Congress intervened.

In 1933 it passed two great "recovery measures"—the National Industrial Recovery Act and the Agricultural Adjustment Act. To assist the Government a "Brains Trust" was created. The significant feature of these efforts is the popular support they received. They were designed to appeal to a middle class which wanted reform without revolutionary change, and they aroused the enthusiasm of a working class whose social outlook did not differ materially from theirs The financial and industrial interests, seeing in them hope of subsidies for depressed industries, did not oppose them. The New Deal was all things to all men, hence the swiftness with which disillusionment came. When it did come, the New Deal was rank bolshevism to Wall Street, and to its enemies a conspiracy to help the bankers and big business.

CHAPTER IX

THE MONEY MACHINE

CURRENCY is one of the outstanding preoccupations of modern politics, though to be sure that is no new thing. What is new is the complexity of the money machine in modern society, and the air of mystery which envelops those who manipulate it. To probe the mystery, we need to know something about how the banking system came into being. Such is the theme of this chapter. Since the beginning of Neolithic times, increasing division of labour has accompanied every technical innovation which has increased man's command over nature and the means of satisfying basic human needs or fancies. Such specialization of human effort involves an *economy*, a process of give and take, the exchange of one commodity for another, or exchange of material things for services. At a primitive level of specialization, an economy of barter suffices for the satisfaction of relatively simple needs or whims by relatively few and simple activities, but barter becomes a clumsy instrument for co-ordinating specialized production when exchange extends beyond the confines of self-sufficing tribal communities.

The adoption of one commodity which is *not perishable*, or at least of a limited number of such commodities, as a *common denominator* for transactions necessitated by specialization of work, becomes advantageous for a variety of reasons It makes the process of exchange more elastic by reducing the volume of traffic involved and by facilitating *deferred payment*. There is little doubt that a monetary exchange arose in this way. To start with, money was bullion, the single commodity which people would accept for goods or services; and coinage was merely a social guarantee that the commodity, with an intrinsic value of its own, was up to standard What we now mean by money is much less straightforward than this Money no longer means coinage of metal the owner can melt down for manufacture of useful or ornamental objects It is a name for tokens of an elaborate system of accounting and insurance, guaranteed by law and treaty, with a long history of misunderstanding and myth, ritual and conflicting social interests behind it. The tokens themselves may have no material utility as bullion. Their value to the owner may be solely contingent on their exchangeability.

The motives which originally encouraged the use of metal as the common denominator of a system of exchange are shrouded in uncertainty, though certain advantages, such as their relative durability, particularly that of the precious metals, are easy to see. Granted the acceptability of some single commodity for whatever reasons, aesthetic, utilitarian or superstitious, the further advantage of making it accessible in units of equivalent size and quality is also clear The early stages of the evolution of a system of coinage are therefore inseparably bound up with the beginnings of a system of weights and measures. At this stage, we have a craft of *moneyers*, who buy metal from the mines, mint it in units of guaranteed weight and standard purity, paying for the raw material in coin and drawing as a reward for their own

labours what is, in effect, a discount by weight on the net transaction The existence of many such mints generates the problem of communal protection against counterfeit by some central authority, which in turn may acquire the monopoly of making coins and hence a monopoly of opportunities to practise counterfeit From this point onwards the usefulness of coins as commodities *per se* declines; henceforth they are progressively reduced to the status of tokens, destined as tokens to compete with mere scraps of paper. The history of the money machine is the history of how a monopoly of opportunities to practise counterfeit has become a system of accounting, to the advantage of those who participate in the monopoly.

Until the eighteenth century English and Scottish currencies, like those of the Continent, were mainly based on silver. Throughout the Middle Ages, gold coins were quite exceptional. There were many local mints, and making money was not as yet a royal prerogative The standard coin of both countries was the silver penny, probably introduced from France in the eighth century. Originally the pound weight of silver was coined into 240 silver pennies; thus a pound of silver reckoned by weight was the equivalent of a pound of silver reckoned by tale or enumeration Early in the twelfth century, as Feaveryear* tells us, the English penny was called "a sterling." Because of its consistent fineness it quickly established its reputation abroad. The origin of the term "sterling" is lost in obscurity. Several explanations have been given, the most plausible being that it comes from *steorra*, a star, a device borne by the early coins Though the silver penny was almost the only coin in circulation before Tudor times, other monetary units, such as the pound, the shilling, and the *mark* (13s. 4d) had their use as yardsticks, but not as mediums of exchange Pounds and shillings were not coined until the reign of Henry VII. Attempts to use gold coins, gold florins (6s.) and roubles (6s. 8d) were without success. Gold coins were of little use when the price of a sheep was a few shillings, and a day's labour, 6d.

Throughout the Middle Ages the weight of the silver penny progressively declined. In 1300 it was 22 grains troy. By 1412 it was 15, and by 1544 it was 10 grains. This steady depreciation was not due to the dishonesty of those who had acquired a monopoly in the manufacture of money. It was due to forces beyond their control. The art of coining was primitive Through deliberate *clipping* and through general wear and tear, coins therefore lost weight rapidly. After the issue of a new coinage, the full weight of silver coins soon disappeared, leaving the old, clipped and light ones in command of the field. The only reasonable solution of a difficulty rising from the circumstances of the time was to issue coins of the average weight of those in circulation. As things turned out, the policy thus thrust upon the mint had a beneficial result. In the later Middle Ages, the value of silver rose because of reduced output of the mines, coinciding with increased demand for currency, as one country after another changed over from barter to a money economy. Had the old weight of the penny been restored, prices would have fallen and trade would have been greatly inconvenienced As Sir William Beveridge has shown, prices rose rapidly from the middle of

* *The Pound Sterling*, 1931, 8.

the twelfth century for about a hundred years, and thereafter at a slower rate till about 1400. For the next hundred years there was a tendency for prices to fall, and this can be associated with expansion of trade and increased demand for silver at a time when supplies of the precious metals were restricted (Fig. 41).

In the sixteenth century, however, the silver content of the coin was drastically reduced, the difference of weight being made up by alloy. Before this time, lightening of coins had been an inevitable consequence of defective technique or persistent operations of clippers and counterfeiters. Now the quality of the coin itself was tampered with. In an age of fierce nationalism and growing expenditure, kings had found debasement of the coinage a ready means of augmenting income. Henry VIII used this device when he cut down the amount of silver and gold in the new coins issued from the Royal Mint in London Between July 1, 1542, and September 30, 1547, the fineness of silver was reduced from 8 3 ounces to 4 ounces, and of gold from 23 to 20 carat Out of this the king made a net profit of £227,378 11s. 9d.* The general results of debasement are similar to those of inflation (p. 233) in modern times Indeed, all the familiar symptoms of monetary disturbance were in evidence. Hardly a year passed without some effort to deal with the situation Between 1538 and 1564, prices rose about 100 per cent, and the foreign value of English currency fell. The problem of how "to make the pound look the dollar in the face" was just as real to Elizabethan financiers as it was to those of our own time after the war of 1914–18 Its exchangeability for the Flemish florin slumped.

As a medium of exchange and as a yardstick, money continues to fulfil a use, when it is no more than a token, but its usefulness then depends on the maintenance of its exchangeability for goods or services at a steady level. In the present century, we have had abundant evidence of all the evil consequences of rapidly-rising or rapidly-falling prices, and we have become familiar with the project of "a managed currency" designed to steady the purchasing power of the pound sterling People want to be sure that the value of their money will not fluctuate. They want to be sure that this week or next week or next year, their wages will command the same amount of goods and services. They want, in short, to live in a society of stable prices. The problems of a fluctuating standard were already urgent in Tudor times. It was a period of soaring prices and debasement at home. Then came the deluge of precious metals from America, pouring into Spain and filtering through every frontier in Europe. Elizabeth, who had to borrow money in Antwerp, found that her loans became more costly as the exchange rate moved against London. All the familiar devices of recent times, the pegging of exchanges and the prohibition of the export of bullion, were tried in a vain attempt to ease the burden.

The social changes resulting from changes of price level were all too familiar to the Elizabethan, but the connexion between the quantity of money, the state of trade, and the level of prices was not clearly appreciated. It was Jean Bodin, a French political philosopher, who first stressed the relations between rising prices, debasement of the currency, and the influx of precious

* Feaveryear, 38

metals from the New World. This was in 1569. Bodin declared that "the principal cause of high prices is always the abundance of that in which the price of goods is measured." At her succession Elizabeth made a bold attempt to deal with the problem of debasement. By proclamation she called in all the light coins, paying for them on a specie basis, and replaced them by a new coinage of the same fineness but of less weight. On the whole transaction the Crown claimed a net profit of about £45,000, thus did Elizabeth "achieve to the victory and conquest of this hideous monster of the base moneys " This operation was salutary in so far as it ended uncertainty and confusion, but it could not check the rise of prices due to reasons Bodin expounded. The upward movement of prices continued until about 1650

Monetary troubles did not end there. Coins continued to be clipped and counterfeited, and the problem of how to maintain the value of the coin remained unsolved. After the Restoration, several important steps were taken to remedy the situation By the adoption of Blodeau's invention of the milling machine in 1663, the milled-edged coin was introduced, and so the activities of the counterfeiters were seriously checked In the same year, restrictions on the export of bullion were removed. Three years later, seignorage, or the charge for minting, was abolished. Any person bringing bullion to the Mint was to have it assayed, melted and coined, and for every pound weight of standard metal was to receive a pound weight of coins without charge. The Crown thus relinquished its ancient privilege of making money out of minting.

London was the first to establish a free bullion market. The final reform was the great recoinage of 1696–9. This was a gigantic task, for the currency was in a deplorable state, consisting of a medley of coins, some dating from the reign of Elizabeth, and all badly clipped and worn Some authorities favoured devaluation, urging that new coins to be issued should be of the same bullion content as the old ones. Others favoured restoration of the old standard by issue of new coins of full weight to replace the old light ones. The first policy would have prevented any serious disturbance of the price level. The latter involved deflation, i e. depression of the price level. In effect the problem was similar to that facing most European countries after the war of 1914–18. In 1696 restoration of the old standard was adopted. Deflation won the day. For the mass of the people the results were so serious as to cause riots and disturbances.

BANKING AND CREDIT

So far we have spoken only of coinage, but we all know that coins play but a very small part in our financial arrangements to-day Bank notes completely swamp metal coins as a medium of exchange; even more payments are made by cheque. Let us now see how this new system came to be grafted on to the old, what services banks render, and how they came into being.

Banks do three things. They take money in custody on deposit, they lend money; and they manufacture money. The first full-fledged bank in England was not founded until 1694, and the first in Scotland until 1695,

but some of these functions were performed by different classes of people before this time. The need for lending money and financing trade arose with capitalism. As the market widened, and producer and consumer were out of immediate reach of one another, the need for credit arose. The weaver of York, whose cloth was sold say in Antwerp, obviously required the assistance of someone who would pay him at once for his cloth. He could not afford to wait until the cloth was shipped to Antwerp and the money remitted from his customer there. It was convenient to be able to turn to someone else who could advance him the money at once, and collect it later from his customer after receipt of the cloth. The device used to settle this business was the *bill of exchange*, which came to be used extensively for international as well as for internal trade in the sixteenth and seventeenth centuries. Long before this time it was used in Italy, in Germany, and even in England itself (Fig 42)

By Elizabethan times the development of capitalism involved credit transactions at almost every stage of the industrial system The farmer required loans to tide him over the period between sowing and harvest The grazier required credit until he received payment for his wool. The domestic manufacturer could not live without credit while his cloth was being marketed. Hence a host of people, scriveners, goldsmiths, yeomen, clothiers, landowners, and even parsons, began to dabble in money-lending. The most important of these early financial intermediaries was the scrivener, whose original business of writing bonds, deeds and contracts, gave him important connexions. In the early seventeenth century some scriveners, besides managing the investments of men of property, were receiving deposits and lending money. By this time, however, their place was being taken by the goldsmith, who combined with ordinary business a thriving trade in collecting new coins, melting them down and exporting the bullion. In a document written at Amsterdam in 1652 we read·

"It is the goldsmiths, especially those in Lombard Street, who are the greatest merchants and London cashiers, and who will receive any man's money for nothing, and pay it for them the same or the next day, and meantime keep people in their upper rooms to cull and weigh all they receive, and melt down the weighty and transport it to foreign parts" (quoted Feaveryear, 93).

By its disturbance of economic life, the Civil War strengthened the activities of the goldsmiths. Landowners and merchants gladly deposited their money with them for safe keeping At first they may have had to pay for the service rendered, but very shortly the goldsmiths paid them interest on their deposits. The next step in the story of banking was inevitable Finding their vaults filled with deposits, the goldsmiths naturally looked for some use to which they might put their funds. They found it among those who wished to borrow. The practice of giving loans received great encouragement from the needs of the Crown Continually at his wits' end for money, Charles II had frequent dealings with the goldsmiths, who received not only interest, but also profit when they melted down the new coins in which the capital was repaid Deposit banking got a new stimulus, and though larger transactions were confined to the greater goldsmiths, the smaller people

began "to haunt the arcades of the Royal Exchange and solicit the merchants with profound bows to be allowed to keep their cash."

Out of these depositing and lending transactions emerged the first bank notes and the first cheques. When a client deposited his money with the goldsmith, he received a receipt or a number of receipts for round sums up to the total deposited In the course of time these goldsmiths' receipts were made out in favour of the depositor or bearer. The following specimen is given by Richards (*The Early History of Banking in England*, 1929, 41).

November 28th, 1684.

I promise to pay unto the R Honble Ye Lord North & Grey or bearer ninety pounds at demand.

for Mr. Francis Child & myself
Jno. Rogers.

If the goldsmith were well known, these I O U's passed from hand to hand. In effect, they were bank notes. It was not a far step from this to the stage when goldsmiths of known repute found out from experience that only a proportion of the note issue need be backed by bullion in their vaults. They now issued notes as loans In short, they discovered that they could manufacture money so long as people were confident that the paper could be exchanged on demand Meantime the goldsmith drew interest on the money he had thus manufactured. Some goldsmiths kept two distinct accounts, somewhat like modern current and deposit accounts. They allowed their clients to write a note directing the payment of part of such a current deposit to someone else This was the origin of the cheque The following is an early cheque issued by Thomas Fowles, a well-known London goldsmith, who carried on business in the reign of Charles II, under the sign of the "Black Lion":

Mr. Thomas Fowles.

I desire you to pay unto Mr. Samuel Howard or order upon receipt hereof the sum of nine pounds thirteen shillings and sixe pence and place it to the account of

yo^r servant
Edmond Warcupp.

14 *Augt.* 1675.
£9 13 6

For Mr. Thomas Fowles, Gouldsmith at his shop between the two Temple gates, Fleete streete.

The cheque, however, did not become a usual instrument of exchange until the beginning of the nineteenth century. Loans made by the goldsmiths were usually effected by discounting commercial bills of exchange or by accepting Exchequer tallies, which was the Government's device for obtaining loans secured on future revenue. Since bills of exchange and exchequer tallies were good negotiable instruments and could be readily cashed, the goldsmiths were able to issue notes far in excess of the actual bullion they held in their vaults Both traders and Government found these financial arrangements a great convenience. They helped to keep the wheels of

industry and commerce going, and they were of assistance to Governments in times when State expenditure was rapidly increasing.

The Government, however, was in a strong position to interfere with the legitimate business of the goldsmiths In 1672, when the Government suspended payments of interest on its loans and repayment of capital as well, many goldsmiths, who had heavily invested in tallies and "fiduciary orders" issued by the various Government departments, found themselves in serious difficulties. This episode, known as "the Stop of the Exchequer," gave a great shock to confidence, and made goldsmiths wary of having any further dealings with the Crown.*

THE BANK OF ENGLAND

This high-handed action of Charles II paved the way for the founding of the Bank of England in 1694. It was clear that there was room for a full-fledged bank which would help to finance the Government in peace and war without anticipating revenue and interfering with normal channels of finance and trade. Proposals for the establishment of a bank had been made before this time, but nothing had come of them for reasons that are found in the political circumstances of the time It was clearly too dangerous an expedient during the absolute monarchy of the Stuarts, because of the risk that the monarch would use the bank for his own ends and make himself financially independent of Parliament After the English Revolution, the situation was different. Parliament now had control over finance and defence. Under such conditions a bank could derive its authority direct from Parliament in accordance with the wishes of the commercial classes who now occupied a more important place in the political life of the country.

Having exhausted every known device to secure additional funds in 1694, the Government of William III gladly accepted the proposals of William Paterson. In return for a loan of £1,200,000 the subscribers should receive 8 per cent and the privilege of being sole banker to the Government. This privilege appealed strongly to London business men, who had seen goldsmiths wax rich and rise to the highest places in society by their banking activities. The project was naturally opposed by the goldsmiths themselves, and by other private bankers who feared such an important rival institution backed by the Government.

The Bank of England was thus born out of the necessities of the Government within the framework of a capitalist economy. It was not a state bank until 1946. It was a private monopoly which had enormously profited by being the Government's banker For instance, shortly after its foundation, the Government declared that no other chartered bank or partnership exceeding six persons should carry on banking in England. The Bank of England retained this monopoly until 1826 Its close association with the Government, however, had its dangers, for since the Bank's privileges were dependent on the periodic renewal of its charter, it had to acquiesce in repeated demands for loans. Thus a serious situation arose in 1793 when Britain had gone to war with France Anxious to raise loans, the Government

* See R. D Richards, *The Early History of Banking in England*, Ch. II and III.

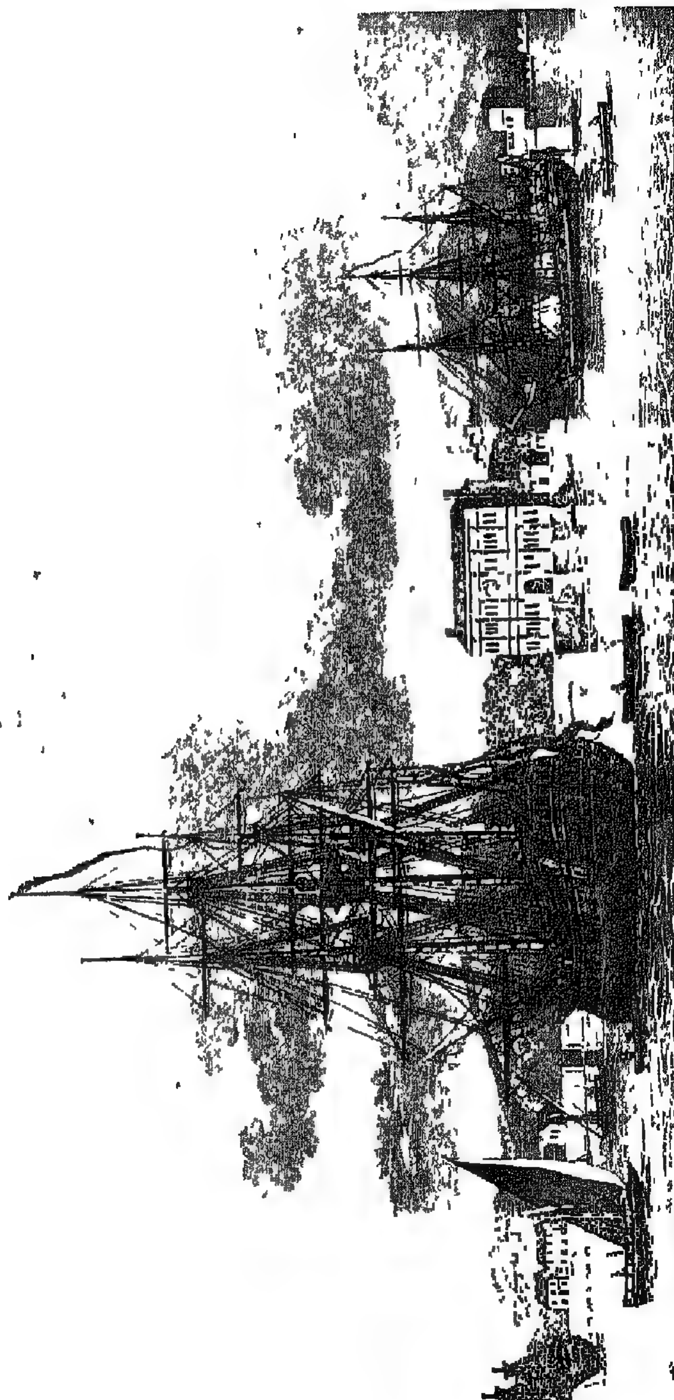
hurried through Parliament a Bill abrogating Section 30 of the 1694 Act, which prohibited a loan to the Government without Parliamentary sanction. This cleared the way for unlimited borrowings. A prudent banker, however, knew that so long as he was obliged to cash his notes on demand there were limits to his capacity to grant loans The situation became serious owing to large Government loans at a time when there was a heavy drain of gold from the bank to meet home and foreign requirements The directors protested. The Government's reply was to pass the Bank Restriction Act of 1797. This absolved the Bank of England from its obligation to cash its notes *in specie* Thus England, and with it Scotland, entered on a period of inconvertible paper money. Soon there were all the familiar signs of inflation. Not until 1821 were cash payments restored.

THE PRIVATE BANKS

Because of the tremendous concentration of economic life in London, country or provincial banking in England was of little consequence until the second half of the eighteenth century Most banking facilities were provided by the private bankers of the metropolis. The typical capitalist before the industrial revolution was the merchant. His headquarters might be in London, but his area of operations might extend over the entire country. He purchased manufactured goods in the markets and fairs both from employers of domestic workers and from independent craftsmen. Since London was a great distributing centre for imported produce, there was a movement of goods outward from London, as well as towards London. It was therefore common for men who had to send goods to the metropolis, to draw a bill on one of the private bankers, and this could be used by someone else to buy goods there. In the eighteenth century, the three-months bill thus became a very convenient financial document

While the main purpose of such a bill is to avoid the necessity for sending cash, it had a further advantage. It facilitated granting credit to those who required it for the conduct of business. The Leeds clothier who sent his cloth to London by wagon wanted his cash at once His creditor in London wished to delay payment until he had received and sold the goods The bill of exchange suited both parties The Leeds clothier could give a bill of exchange (a U O Me), "accepted," i e countersigned by his client, to the banker, who would "discount" it forthwith; that is to say, pay its face value less interest on the transaction. The banker took the risk of collecting the debt when due, and pocketed the discount as his reward for taking the risk and advancing the money (Fig. 43)

Discounting bills became an extensive business before the use of cheques was widely established Up and down the country, shopkeepers and others in the habit of making purchases in London naturally welcomed it as a side-line for making money and thus providing themselves with funds to settle debts in London. Some of them came to do a large business in bill-discounting. It became their main job. They began to take deposits and perhaps to issue bills and notes of hand, so becoming full-fledged bankers. There were few of these full-fledged bankers in England before 1750,





Commerce.

Trade and a well regulated Commerce flourishes by Multitudes, and gives Employment to all its Professors. Fleets of Merchantmen are so many Squadrons of Floating Shops that vend our Wares & Manufactures in all the Markets of the World, and with Dangerous Industry, find out Chapmen under both the Tropicks.

FIG. 49. COMMERCE.

(*Bickham*, The Universal Penman, 1733.)

The ships, the harbour, documents of trade, such as the bill of lading, the merchants themselves and Bickham's caption emphasise the dominance of overseas commerce to eighteenth-century Britain

(See p 248)

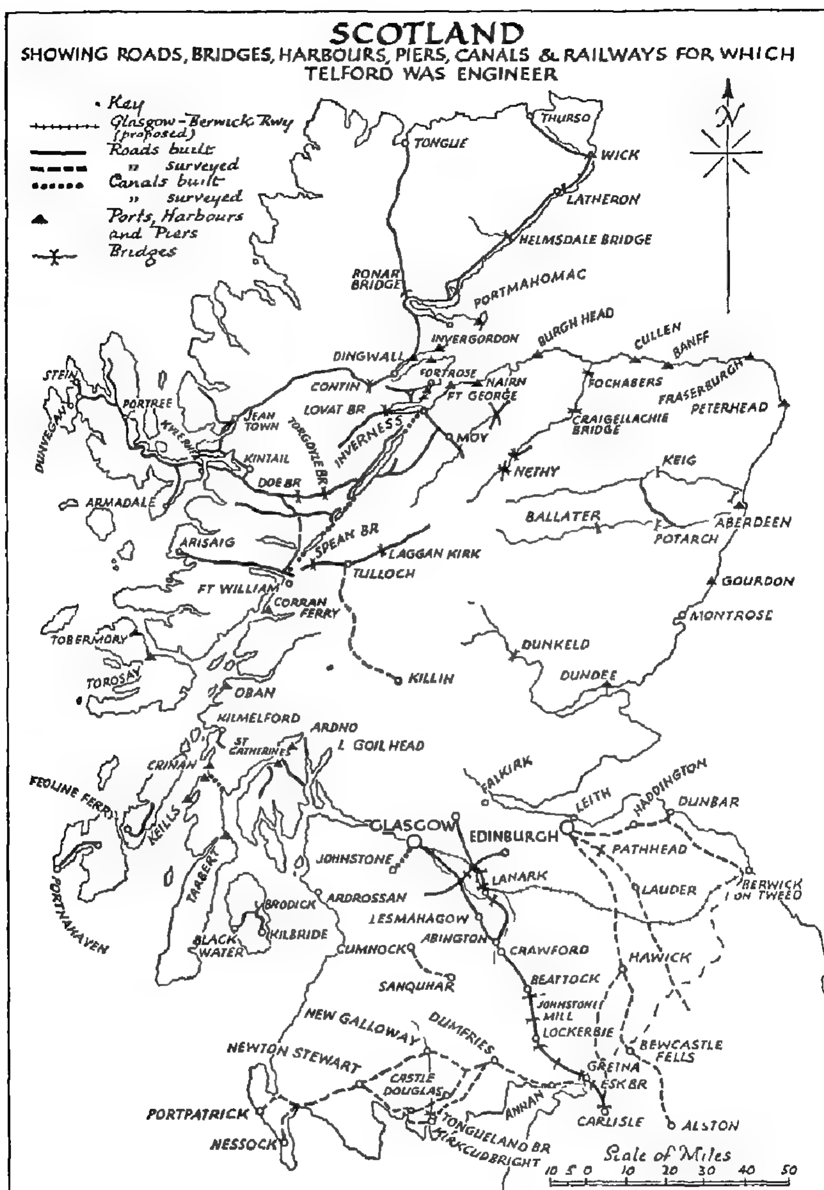


FIG. 50. TELFORD'S GREAT WORK IN SCOTLAND

(*Gibb*, The Story of Telford, *by permission of Alexander Maclehose & Co*)

This map shows at a glance the remarkable work performed by Thomas Telford, distinguished representative of the new profession of civil engineering A fascinating first-hand account of his work is given by the poet Southey (*Journal of a Tour in Scotland*, 1819), who accompanied him on one of his journeys of inspection

(See p 276)



FIG 51 CONSULTATION OF PHYSICIANS.

(Hogarth)

In this print Hogarth satirises contemporary physicians less interested in advancing medical science than in maintaining their social status and keeping their profession a close preserve. Medical knowledge advanced in the more liberal atmosphere of the universities of Edinburgh and Glasgow, while it stagnated in the close corporation of the London College of Physicians and in the ancient universities of Oxford and Cambridge.

(See p 282)

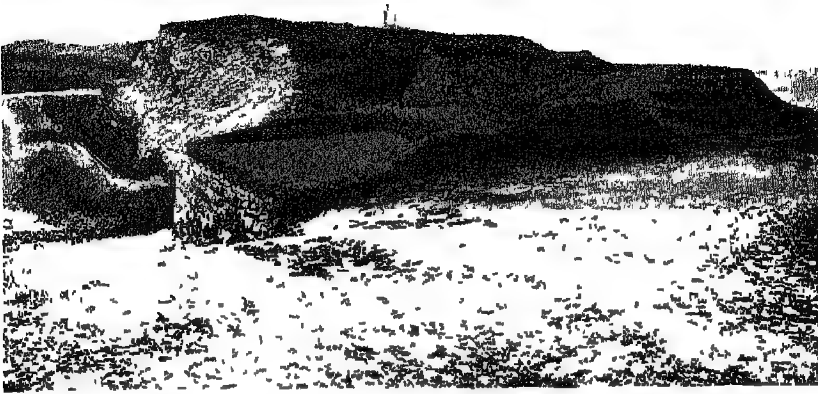


FIG 52. OLD SARUM

(*Waters*, An Economic History of England, *by permission of the Clarendon Press, Oxford*)

What had been the borough of Sarum was now no more than a field of which the owner was the sole elector of a member of parliament There were many such *rotten boroughs*, while such industrial towns as Manchester and Birmingham were without any representation

(See p 291)



FIG 53 SATIRICAL CARTOON, 1819

(*Waters*, An Economic History of England, *by permission of the Clarendon Press, Oxford*)

During a mass meeting held in Manchester to agitate for political reform, the military drove down on defenceless people whose only crime was their interest in the franchise

(See p 295)



FIG 54 A VIEW OF NEW LANARK

(*Podmore*, Robert Owen, *by permission of George Allen & Unwin, Ltd*)

This was the factory of a man of vision Owen planned New Lanark at a time when factories were being crowded into towns with workpeople's dwellings around them Here in more pleasant surroundings was a large cotton mill, a school for children, village hall and other buildings for communal activities, with homes nearby of employees (See p 297)

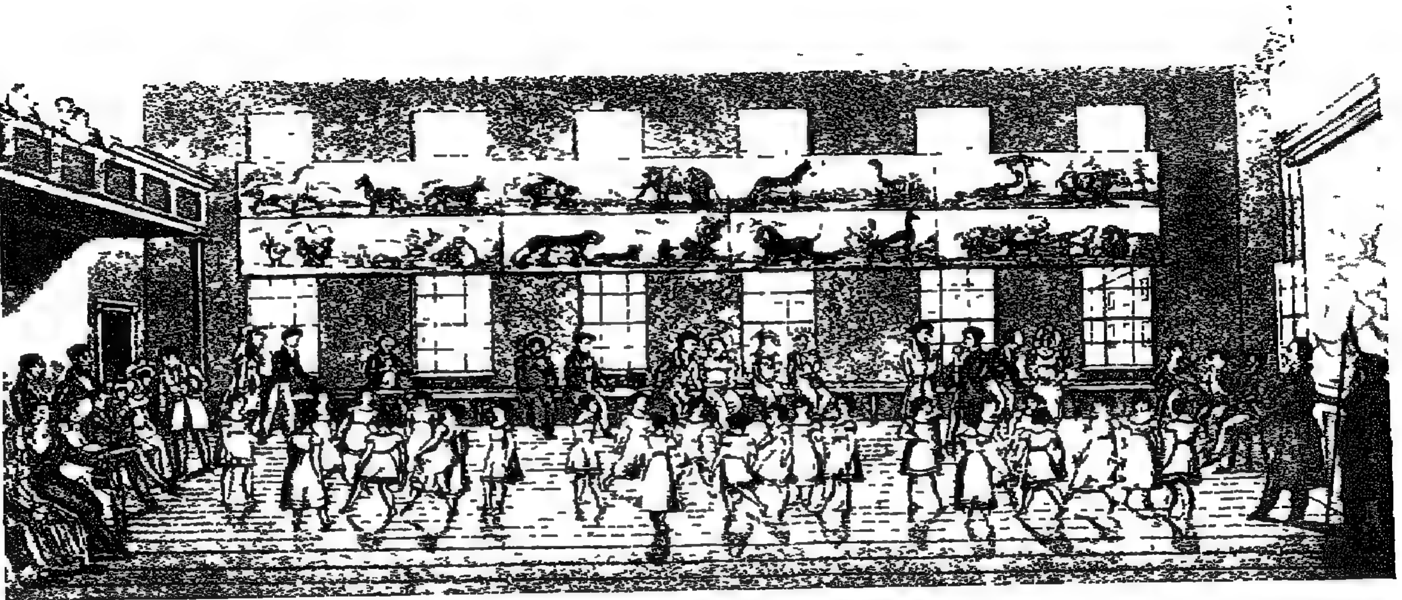


FIG 55 MODEL OF ROBERT OWEN'S PROPOSED COMMUNITY

(*Podmore*, Robert Owen, *by permission of George Allen & Unwin, Ltd*)

Disgusted with competition because of the selfish motives it fostered, Owen turned to co-operation as a more satisfactory basis of economic and social life If his vision of communities where largish groups of people would live together in peace and harmony was far-fetched and unduly optimistic, his insistence on deliberately *planned* economic effort has now come into its own

(See p. 297)



FIG 57 LACE-MAKING

(*Knight*, Cyclopaedia of the Industry of All Nations, 1851)

Knight, from whose book this illustration is taken, was anxious to show the value of industry This picture of women working at home does not portray the harsh conditions under which they laboured Lace-making, like tailoring or glove-making, was indeed a sweated occupation Pay was for piece work Hours were long and working conditions wretched in the extreme It was of such that Thomas Hood wrote *The Song of the Shirt* (See p 323)

(49)



XXII.

Look at your Copy.

WHEN FRANCES goes to school, to write,
I find, with great concern,
She never takes the least delight
To really strive to learn.

D *

FIG 58 THE WRITING LESSON.
(*Turner*, The Cowslip, 1811)

In the eighteenth and nineteenth centuries, teaching was the last refuge of the genteel woman who had failed to find a husband It was a hard, dull, uninspiring occupation, as this illustration shows, but, though badly paid, it was regarded as a genteel vocation
(See p 325)



FIG. 59 FASHIONABLE DRESS, 1868

(*By permission of the* Illustrated London News)

Elaborate dress, portrayed in this illustration, reflects the place occupied in society by middle and upper class women in the mid-nineteenth century. Men were the pillars of society, women its ornaments. Secure from the rough and tumble of economic affairs, they could lead a life of idleness, devoting some of their leisure to the acquisition of accomplishments likely to enhance their value in the marriage market. Such was the role against which such women of character and spirit as Florence Nightingale revolted

(See p. 327)



FIG 60 THE FEMALE SCHOOL OF ART, QUEEN'S SQUARE THE LIFE CLASS, *1868*

(*By permission of the* Illustrated London News)

At the time this school declared itself to be "the only one devoted exclusively to female education in art and deserves a visit from those interested in the advancement of *art-education amongst women*" Upwards of *120* students were on the books, we are told, and as many as 150 could be accommodated

(*See p 331*)



FIG 61 A YOUNG LADIES' COOKERY SCHOOL, 1880.

(*By permission of the* Illustrated London News)

Though it was not proposed that "young ladies" should actually turn their hands to cooking, some knowledge of the art would be of value to the married woman who would otherwise be at the mercy of her cook The Press comment states "the social dignity and artistic elegance, as well as the intellectual and scientific character of this female occupation, which has always been esteemed for its practical utility, will henceforth become more generally acknowledged "

(See p 334)



FIG 62. LADY CRICKETERS, 1889.

(*By permission of the* Illustrated London News)

By 1889 women had gained notable improvements of legal status and of educational opportunity Here they are challenging masculine exclusiveness in outdoor sport, still handicapped by the prevailing style of feminine attire

(See p 336)

Departures and Arrivals of the different Stage-Coaches.

L O N D O N.

A Diligence ſets off from James Buchanan's, Saracen's Head-Inn, upon Sundays, Tueſdays, and Thurſdays, at 12 o'clock at night—Arrives up on Saturdays, Mondays, and Wedneſdays, at 9 o'clock at night

E D I N B U R G H.

A Diligence departs from James Buchanan's, Saracen's Head-Inn, at 9 o'clock morning—Arrives the ſame afternoon about 3 o'clock

A Coach goes by Falkirk and Linlithgow, from Thomas Dune's Black Bull-Inn, Argyle's-ſtreet, every lawful day, at 8 o'clock morning—Arrives the ſame afternoon, about 5 o'clock

Alſo a Coach ſets out by way of Holy-Town, from the ſaid Inn, every lawful day, at 8 o'clock morning—Arrives the ſame afternoon, about 4 o'clock

A Fly departs from Andrew Dunbar's, King's-Arms, every lawful day, at 8 o'clock, morning—And Arrives the ſame afternoon, betwixt 4 and 5 o'clock

A Coach departs from John Porteous, at the ſign of the Leaping-horſe, ſouth ſide Trongate, at 8 o'clock morning—Arrives the ſame afternoon, betwixt 4 and 5 o'clock

Alſo a Coach from the Crown-Inn, Gallowgate, at 8 o'clock, morning—Arrives about 4 o'clock the ſame afternoon

FIG 63 A STAGE COACH TIMETABLE

(*Glasgow Directory*, 1787)

In the generation before Waterloo, the stage coach, based on the new turnpike roads, was still a novel form of transport According to the standards of the time, it was a speedy form of travel, supplemented on the canals by the "fly-boat"

(See p 346)

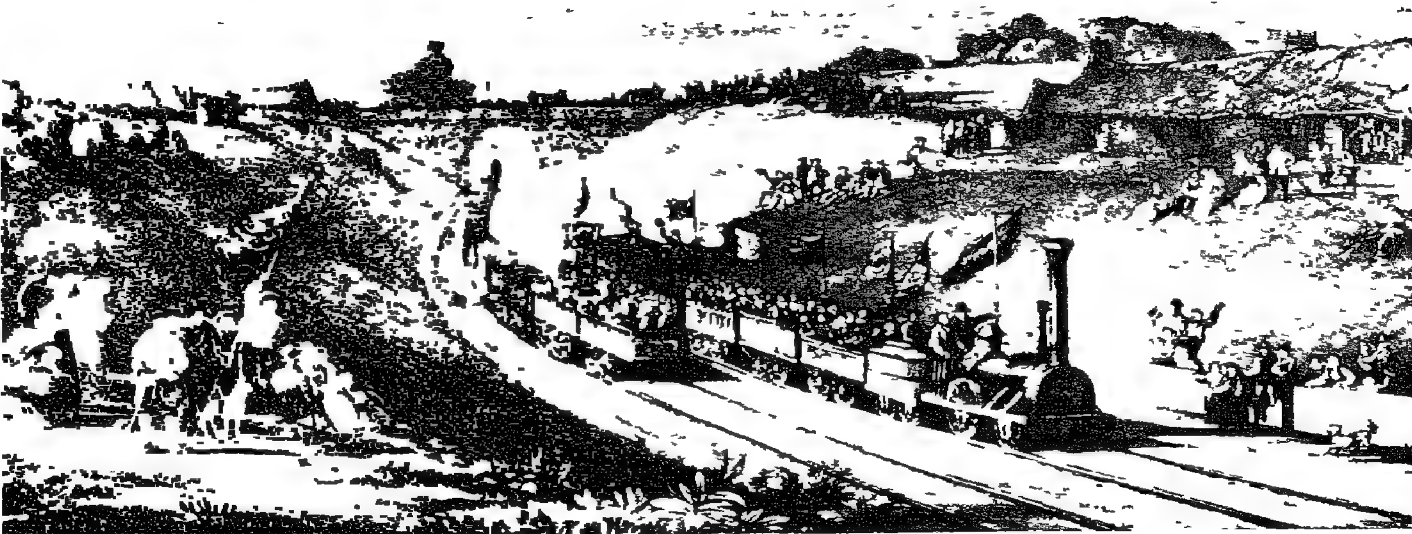


FIG 64 OPENING OF THE GLASGOW AND GARNKIRK RAILWAY, 1831

(By permission of Jackson, Son & Co)

(See p 347)

though there must have been scores of shopkeepers, drapers, importers, corn dealers and other business people who combined bill-discounting with their ordinary business, and some no doubt issued their own notes.*

The industrial revolution created conditions favourable to the development of country banking Commercialization of farming made necessary provision of banking facilities in the important agricultural areas. Deposit banking developed as farmers paid their surplus funds after harvest, while the practice of discounting bills grew as farmers sought credit in spring-time when out-payments were large. Development of the factory system and rapid growth of town life also called for banking facilities on the spot. In the industrial areas, such as the Midlands, Yorkshire and Lancashire, the bill of exchange was in common use, and passed from hand to hand by endorsement. "These bills," says Feaveryear, "formed the only paper currency of the West Riding and Lancashire, for no country bank notes circulated in those parts." According to an estimate given before the Bullion Committee of 1810, there were 230 country banks in 1797, over 600 in 1808, and 720 in 1810. Many of them grew out of ordinary business. Thus the corn dealer might add bill-discounting to his business, and eventually became a country banker. The "Old Gloucester Bank" originated in the business of James Wood, chandler. Lloyds Bank can trace its beginnings to Samson Lloyd, a Birmingham ironmaster, and his partner John Taylor, maker of buttons and snuff boxes.

SCOTTISH BANKING

In some respects the history of Scottish banking resembles that of England. With respect to others, it is fundamentally different In its early stages, the goldsmiths played a leading role in Edinburgh, as they did in London. Moreover, the bill of exchange was used extensively in the settlements of internal trade. Generally, however, Scottish banking proceeded on different lines from banking in England. The first bank was the Bank of Scotland, founded in 1695. Like most chartered bodies of the time, it got a monopoly, but it was limited to twenty-one years, and when the period expired there was no request for renewal The way was thus clear for the founding of other joint stock banks, with the right to issue notes and carry on banking business Steps were soon taken to establish another bank The outcome was the founding of the Royal Bank of Scotland in 1727. For a time these two important banking companies were keen rivals, and on one occasion the Bank of Scotland was compelled to close its doors (Fig 44).

A feature of Scottish banking has been the close relations that have subsisted between the banks and industry The Royal Bank started this profitable alliance when it instituted the cash credit system, whereby a client of good repute could obtain an advance on the security of two names. He could draw against the advance when he was in need of funds, and when his financial position was strong he could pay in to reduce the debt standing against his name. The system was of great benefit to small men. Closely allied to this development was the deposit system started by the Bank of

* See "Money, Finance and Banking," by A. V Judges, in *European Civilization*, 1937, 477.

Scotland in 1730. To these two features of Scottish banking one must add a third, branch banking, which owes its extension to the British Linen Company, founded in 1746. It originally began as a mercantile and financial concern connected with the linen industry, but soon confined its activities to banking alone. From its inception it established branches in many parts of Scotland, thus taking banking facilities, hitherto concentrated in Edinburgh, into the towns and villages of the remote countryside.

As was natural, however, such towns as Glasgow, Aberdeen, and Dundee would not be satisfied indefinitely with mere branches In Glasgow, flour and sugar merchants, following the lead of merchants in Edinburgh, had already added banking to their business before 1749, when Aberdeen took the initiative of founding the first complete bank, the Aberdeen Banking Company, outside the capital. In the following year the Glasgow merchants founded the Ship Bank, and shortly afterwards, the Arms Bank. The old chartered banks in Edinburgh viewed the development with alarm, and took immediate steps to crush them "It is proposed," says a secret document drawn up by the two banks in 1752, "that a mutual friendship and harmony be cultivated, thereby to support, maintain and defend each of them their own and the other's interest against all attacks that may be made by the other Societies that pretend to carry on the business of Banking in other parts of Scotland other than Edinburgh, without lawful authority" (Munro, *Royal Bank of Scotland*, 117–19). The method of warfare was simple. It was to collect as large a quantity as possible of a rival's notes and to present them for payment, with the object of exhausting cash reserves. Through the use of this trick the Aberdeen Banking Company had to close its doors. The Glasgow banks proved more stubborn. By the adoption of legitimate, yet troublesome, tactics, they retained their solvency. Writing of the Glasgow Arms Bank, Rait says:*

> "not only was payment made in sixpences but the Teller proved himself an adept in obstructive tactics, miscounting the money and counting it over again 'from one hand to the other, sometimes letting fall a sixpence for a pretence to begin anew.' Time was also occupied in sounding a coin to see if it rang true and in discussions about an odd size or shape . . . and, on occasion, the Teller would be summoned to attend to urgent business and the porter ordered to take his place and to 'blunder with great alacrity'."

The victory of the Glasgow banks stimulated the founding of similar local banks. Since there was no restriction on their operations or on their size, all of them issued notes, discounted bills, and carried on the cash credit system, and established branches in their own district, and almost all were joint stock companies with transferable shares, though not with corporate privileges. Generally they adopted a semi-public designation, such as the Banking Company of Dundee (1763), the Banking Company of Aberdeen (1767), the Banking Company of Stirling (1777), the Banking Company of Greenock (1785), and so on By 1800 Scotland had three large chartered banks with headquarters in Edinburgh, as well as numerous local banking companies with branches in their own areas.

* *The History of the Union Bank of Scotland*, 1930, 29–31

THE GROWTH OF CENTRAL BANKING

To-day the Bank of England occupies a very special place in our banking system. It is "the Central Bank." This unique position has come about through the operation of measures extending over more than a hundred years. From its beginning the Bank was privileged beyond all others in England. Until 1826 it was the only joint stock bank, and in fact, though not in law, it was the only note-issuing bank in London. As banking in London and the provinces extended, the position of the Bank of England got stronger It was the obvious institution through which other banks could settle their debts with one another.

Being a great mercantile city, a great port, and a great distributing centre, London naturally attracted the attention of Scots as well as of provincials. Before 1800 the Scottish banks had established a clearing system for notes in Edinburgh, and settlement was made by means of drafts in London. In England, because of the ready negotiability of the bill on London, all the provincial banks came to have agents there on whom they might draw and from whom they might obtain supplies of specie when necessary. Because of the privileges conferred on it by charter, as well as by the prestige attached to being the Government's banker, the Bank of England stood higher in the financial hierarchy than any other bank. Confining its business largely to Government and the chartered companies, such as the East India Company, it left ordinary commercial business to the non-issuing London banks It became the custom of the non-issuing London banks to keep their reserves in Bank of England notes, which, in effect, constituted the chief currency of London.

The metropolis thus became the centre of a financial web whose strands stretched over the entire country Here were the makings of a unified banking system, whose essence is centralization of the cash reserves of the country in London. If any country bankers experienced excessive business involving the discounting of bills in their own notes, or perhaps of paying their notes in cash, they drew on their reserves in London, and in turn the London bankers drew their reserves at the Bank of England. It only awaited the development of the current and deposit cheque system and the centralization of the note issue to complete the process of making the Bank of England the corner-stone of the banking system (Fig 45).

Cheques had been used to a small extent by the London goldsmiths Unlike bank notes, they could be drawn for specific sums by individual customers of the banks against their deposits. The system had great advantages, and it is not surprising that it spread in the eighteenth century. The use of the cheque, however, complicated still further the indebtedness of the banks to one another, for in the course of a day a bank might receive cheques drawn on a score of other banks. Sooner or later some system had to be devised to settle payment of cheques. Banks in London, where the system developed first of all, adopted the device of employing one or two "walk-clerks," who went round from one bank to another collecting cheques. Perhaps one clerk, brighter than the others, hit on the plan of fixing on a common meeting-place where they could exchange cheques and settle any

balance. In 1770 the London Walk Clerks made a public-house in Lombard Street their rendezvous.

"Here, in the public room, or, according to tradition, on the posts in the court outside, each day after lunch, a rough system of exchange of cheques was carried on between the clerks from each bank, the balances being settled in notes and cash. This rough system of clearing grew to such an extent that the bankers became alarmed at the large amount of notes involved and rented a room for their clerks to meet and exchange drafts" (quoted C R. Fay, *Great Britain from Adam Smith to the Present Day*, 1928, 107)

From these beginnings arose the Clearing House system. For many years the banks who were members of the Clearing House settled their balances in Bank of England notes. In 1854, by which time the cheque system had become universal, they settled by means of a cheque drawn on the Bank of England. To make this possible, the banks agreed to keep their cash reserves in the form of a deposit at the Bank of England. To facilitate this system the Bank of England itself became a member of the Clearing House in 1864. From the City the practice spread to the London suburban area, and then to the large provincial centres, where cheques were cleared every day. The balance was settled by drafts on the London offices of the banks, which in turn settled their differences by drafts on the Bank of England.

The convenience of having an account with the Bank of England for the settlement of cheques was not the only consideration involved Bankers found it to their advantage to keep the cash reserve in their own tills as small as it was safe to do, depositing the bulk of their cash elsewhere Gradually a one-reserve system was adopted, because it was in the interest of every bank to be able to turn to one institution with large reserves which could be freely drawn on in an emergency The position of the Bank of England as the Central Bank was strengthened after the Bank Act of 1844, designed to give it the monopoly of note issue in England After the war of 1914–18, Bank of England notes became legal tender throughout Britain The Scottish banks, for instance, may keep Bank of England notes instead of gold against their own notes issued in excess of the fiduciary issue. This highly centralized system is of immense importance. It places within the power of the Bank of England control of credit throughout the country (see below, p. 233).

THE BANK CHARTER ACT OF 1844

To-day the note issue of the Bank of England is based on the principles laid down in the Bank Charter Act of 1844. Soon after establishment of the gold standard, controversy raged round two matters. One was the monopoly of joint stock banking by the Bank of England. North of the Border there was no such restriction, and joint stock banks were highly successful Scotland was thus a standing example of the commercial advantages of corporate banking In 1826 England took the first step to fall into line with Scottish practice Joint stock banks were permitted outside the London area. Another Act of 1833 confirmed the monopoly of the Bank of England with respect to note issue in London, but brought to an end its joint stock monopoly.

In the next few years several important banks were formed—the London Joint Stock, the London and County, and the Union of London. But joint stock banking did not develop rapidly while the liability of shareholders was unlimited This hindrance was removed by a series of Acts between 1855 and 1879. Thereafter joint stock banking became general. This facilitated amalgamation.

The other controversy was about the note issue, and this was settled in the Bank Charter Act of 1844. Before this time the Bank of England, joint stock banks outside London, and numerous smaller provincial banks issued their own notes. There was no statutory restriction. The issue of each bank was left to the judgment and prudence of its directors or partners. It is not surprising that bankers often issued more notes than their reserves justified. A run on the banks quickly exhausted cash reserves, and large quantities of notes were left unpaid The Bank Charter Act of 1844 attempted to remedy this state of affairs. It applied to England, and it had two objects. One was to limit the quantity of bank notes circulating on credit, and to ensure that the remainder should be backed by an equivalent amount of coin or bullion. The other was to concentrate monopoly of note issue south of the Border in the hands of the Bank of England

The Bank of England was divided into two departments—the Issue Department, concerned with the issue of notes, and the Banking Department, concerned with ordinary banking business. The Issue Department was permitted to issue notes against first-class securities up to fourteen million pounds, but thereafter every note was required to be backed by an equivalent amount of gold The issue of notes by other banks was limited to an amount determined by their circulation prior to the passing of the Act. Further growth of banks with power to issue was to stop. Any existing note-issuing bank which failed, or amalgamated, or increased its partners beyond six, automatically lost its right to issue notes. As a consequence of this provision, private note-issuing in England came to an end The last bank of this sort was Fox, Fowler & Co. By amalgamating with Lloyds Bank in 1921, it lost its note-issuing rights. Thus the Bank of England was left alone in the field. By this time its fiduciary issue had increased from fourteen to nineteen million pounds, since it was permitted to take two-thirds of any lapsed note-issue. In 1845 the same principle was applied to the Scottish banks There were to be no new banks of issue, and existing banks were to have fixed fiduciary issues, but they might issue more notes provided they were backed by gold In Scotland, however, no individual bank had a privileged position. The result is that all the Scottish banks now issue notes.

On the outbreak of war in 1914, the Treasury started an unrestricted issue of £1 and 10s. notes At the end of the war, the Cunliffe Committee recommended a return to the principle of the 1844 Act. After further inquiry the Currency and Bank Notes Act followed in 1928. The new fiduciary issue was fixed at 260m pounds, after which each note had to be backed by an equal amount of gold The Act of 1844 had been rigid Note-issue could not be increased without an increase in the gold reserve In 1928 there was an attempt to remedy this by giving the Treasury power to assent to an

increase or decrease of the size of the fiduciary issue, subject to two conditions:

(a) that such authority should not run for more than six months;

(b) that it might be renewed or varied, but not so as to remain in force for more than two years without Parliamentary sanction By permitting the Scots banks to hold Bank of England notes instead of gold, Britain adopted a one-reserve system.

DEPOSIT AND CHEQUE SYSTEM

One of a bank's ostensible jobs is to provide purchasing power to meet the varying requirements of trade. Before mid-Victorian days, the common method was to discount bills or make loans in notes. The scale of trade operations, however, made payment in notes and coin a cumbersome business. The cheque cut out a lot of fuss and bother, because it could be drawn for an exact sum required, and could be paid into an account. The monetary transaction then simply consists of debiting one account and crediting another When the Act of 1844 limited the possibilities of profit through note circulation, the convenience of the cheque became more apparent. Instead of paying a loan to a customer by handing over a bundle of notes, a banker gave him a credit in his books and a cheque-book, with power, in effect, to write his own notes. Everyone is now familiar with the adage that loans make deposits. When Mr. A. gets a loan of £1,000 from his bank, the bank requires security; and its deposits increase as if Mr. A. had actually deposited £1,000. By this device of accountancy, the banks manufacture purchasing-power on which they can charge interest. Although countless people pay their incomes into a bank account, and merely use cheques as a convenient way of settling accounts, the bulk of deposits represent *loans* and not savings.

This system was vastly stimulated by the Act of 1844. More and more the use of coins and notes was restricted to relatively small payments. In the course of time the great mass of transactions came to be settled by cheque, though sometimes firms continued to use inland bills of exchange. The promoters of the Bank Act had not foreseen this development. On the contrary, they believed they were restricting the power of banks to create credit. The deposit and cheque system defied any such restriction. The bank could still manufacture money. Indeed, there were no legal limits to the amount of loans a bank could now grant. In practice, of course, bankers learned what they had learned with bank notes. Some specie must be kept as reserve for those who wish to cash notes or cheques By custom, the proportion between cash reserves and liabilities came to be fixed round about 10 per cent, but there is no statutory limitation. Thus the cheque gradually drew all banks into the same system, and strengthened the growing authority of the Bank of England. The mass of payments thus resolve themselves into bank entries. One person's account is credited, another debited, while the clearing-house system settles balances between the different banks.

THE GOLD STANDARD

The gold standard is a subject of great historical interest and indeed of current political controversy. Since gold has occupied so large a place in the history of mankind it is important to understand how and why people came to put their faith in the metal.

A gold standard means that the unit of currency—the pound sterling, the mark, the dollar or franc—is guaranteed equal in value to a fixed and invariable quantity of gold. This implies that one should be able at any time to convert notes into gold, or *vice versa*, and in any quantity. To fulfil this condition, it is unnecessary that gold coins should circulate. It is sufficient that gold is obtainable on demand and in unlimited quantities. We can therefore have a gold *specie* standard (with gold coins circulating) or a gold *bullion* standard (without gold coins). The former was the system in operation in Britain till the war of 1914–18. The latter was established in 1925, and remained in force until 1931.

Britain took the first step towards establishing a gold standard in 1774. Before this time gold and silver theoretically enjoyed equal claims. Both were minted freely, and coins of either sort were legal tender. When two metals circulate together, the ratio between them tends to be upset by circumstances affecting the supply or demand of either of them Till late in the seventeenth century gold coins served for large payments in home and foreign trade For ordinary purposes the less valuable metal was in common use. About the end of the century the supply of gold expanded, because increased quantities came from Africa. The demand for silver as currency and for export to India mounted steeply. Thus silver appreciated in value as gold depreciated. The Government was forced to act, and in the Coinage Act of 1774 the legal tender of silver was limited to £25. Gold was thus left in a privileged position The final step towards establishing a gold standard was taken in 1816. By the Coinage Act of that year provision was made for the free coinage of gold at the Mint price of £3 17s. 10½d. per ounce Troy, and the legal tender of silver was limited to 40s. In the following year the sovereign weighing 123 grains became the standard coin, replacing the gold guinea which had held that position since its introduction in 1663

After the discovery of gold in Australia and California, European countries followed Britain's example. Those which still had a bimetallic currency found it impossible to keep a steady ratio between gold and silver in face of the tremendous output of gold from the new sources of supply. One by one they abandoned the attempt and established the single gold standard. Germany was first in 1871, followed in the next year by the Scandinavian countries, then by Holland, and later by Austria-Hungary, Russia and France. Across the Atlantic the United States, and in the Far East, Japan, joined the ranks of the gold-using countries China was the only notable nation which retained a silver standard. Over the greater part of the industrial world, the monetary unit (the pound sterling, the franc, the mark, the dollar, the yen, and so on) became legally tied to gold. This was of immense importance, because it provided a common sheet-anchor for all the chief currencies. The legal determination of the gold equivalent of the monetary

unit was not, however, the only condition countries subscribing to the international gold standard had to fulfil. They also had to permit free importation and exportation of gold in unlimited quantities. These were "the rules of the gold standard game." Any attempt of one country to break them upset the system. The attempt to observe them also caused penalties. A country which carried them out to the letter might involve itself in danger of upsetting its own internal economy.

For a time bankers regarded the gold standard as a fool-proof device for regulating the money machine. This simple faith was shaken after the premature and disastrous re-establishment of the gold standard in 1925 The Cunliffe Committee, appointed to advise on the stabilization of currency and banking during the war of 1914–18, paid a glowing tribute to the gold standard of Victorian days With some justice they showed that the gold standard had been largely automatic in pre-war days. There were no means by which legal tender currency could be increased except by the import of gold, and no means of diminishing it except by export of gold If the Bank of England, compelled by law to buy at the price of £3 17s. 9d. per ounce, got more bullion, there was an increase of the note issue This resulted in an expansion of credit, for their cash reserves increased as Bank of England notes passed into the hands of commercial banks The latter could therefore extend credit to their customers. Conversely, if the Bank of England sold gold abroad, the result was diminution of note issue and consequently of credit facilities.

One of the great merits of the international gold standard was the stability of the foreign exchanges, which moved within narrow limits fixed by the cost of transporting gold from one country to another. If a country's imports relative to exports were steadily rising, the exchanges moved against her There was an outflow of gold. Consequently the international gold backing of the paper currency in circulation contracted. Purchasing power was diminished, and prices fell This gave a stimulus to export and a check to imports. Conversely, if exports were soaring ahead of imports, the foreign exchanges would be favourable. Foreigners would find it convenient to pay for goods by sending gold, which would increase purchasing power. So prices would tend to rise, thus checking exports and promoting imports. The movement of gold from one country to another thus encouraged correspondence of price levels in the gold-standard countries. The free trade policy of Britain, which allowed foreigners to pay interest and repay capital in the goods of their own country, helped the system to work smoothly.

It is roughly true to say that there was an automatic machine to adjust the value of purchasing power to world prices in the heyday of the gold standard It is also true that there was grit in the wheels of the machine. The weakness of a gold standard, completely uncontrolled except by the automatic movements of the metal itself, is that it hands over the whole direction of the money machine to mere chance. A drain of gold abroad could check credit and precipitate a financial crisis. Such crises occurred in the years 1825, 1836 and 1847 The discovery of a gold-field would ultimately result in the expansion of note issue, creation of credit, and rising prices At the close of Victoria's reign the flow of gold from the South

African Rand, from the Yukon and from West Australian mines, set in motion an expansion of purchasing power. In Britain prices rose by 35 per cent between 1895 and 1914, in Germany by 42 per cent, in France by 44 per cent, and in Russia by 52 per cent.

Before the war of 1914–18 the automatic working of the gold standard was already debatable. Indeed, the Bank of England was taking steps to "manage" money. Even before this time the Bank of England, as the central bank of Britain, did not permit complete automatism When there was a drain of gold to foreign countries, it raised its bank rate. This had the double effect of encouraging foreigners to leave their gold here and of checking the expansion of credit. Before the war of 1914–18 another trick was tried out. This was the device known as "open market operations," by which the Bank of England has come to exercise control over credit and prices. If it wishes to check expansion of credit, or neutralize effects of the import of gold, it sells securities. The brokers or merchants who buy them have to pay for them. Payment depletes their deposits, and in turn the cash reserves of the banks with which they deal Reduction of a bank's reserves at the central bank in turn compels it to restrict its own advances. In other words the effect of selling securities is to check expansion of credit. Conversely, by buying securities, the Bank of England can increase the reserves of the commercial banks, and so enable them to expand credit. Before the war of 1914–18 Britain was therefore moving towards "a managed currency," and away from the automatic working of the gold standard.

By its tremendous increase of paper money and its interference with foreign trade, the war itself drove one country after another off the gold standard. With the sheet-anchor of gold removed, the forces making for a common level of prices cease to operate. What determined each country's price level independently was its own domestic policy. The wholesale *price index* number, registered as 100 in 1913, had reached the following levels by 1920 (Heaton, 615)

Great Britain	307
France	509
Holland	292
Sweden	359
Italy	624
Germany	1,965

Except when they were artificially pegged, the foreign exchanges fluctuated wildly from the old gold par. The new rates had to express the relation between the purchasing power of the different currencies. While the old gold par of exchange between London and Paris was £1 equal to 25 22 francs, the rate rose in war time to over 130 francs to the pound sterling.

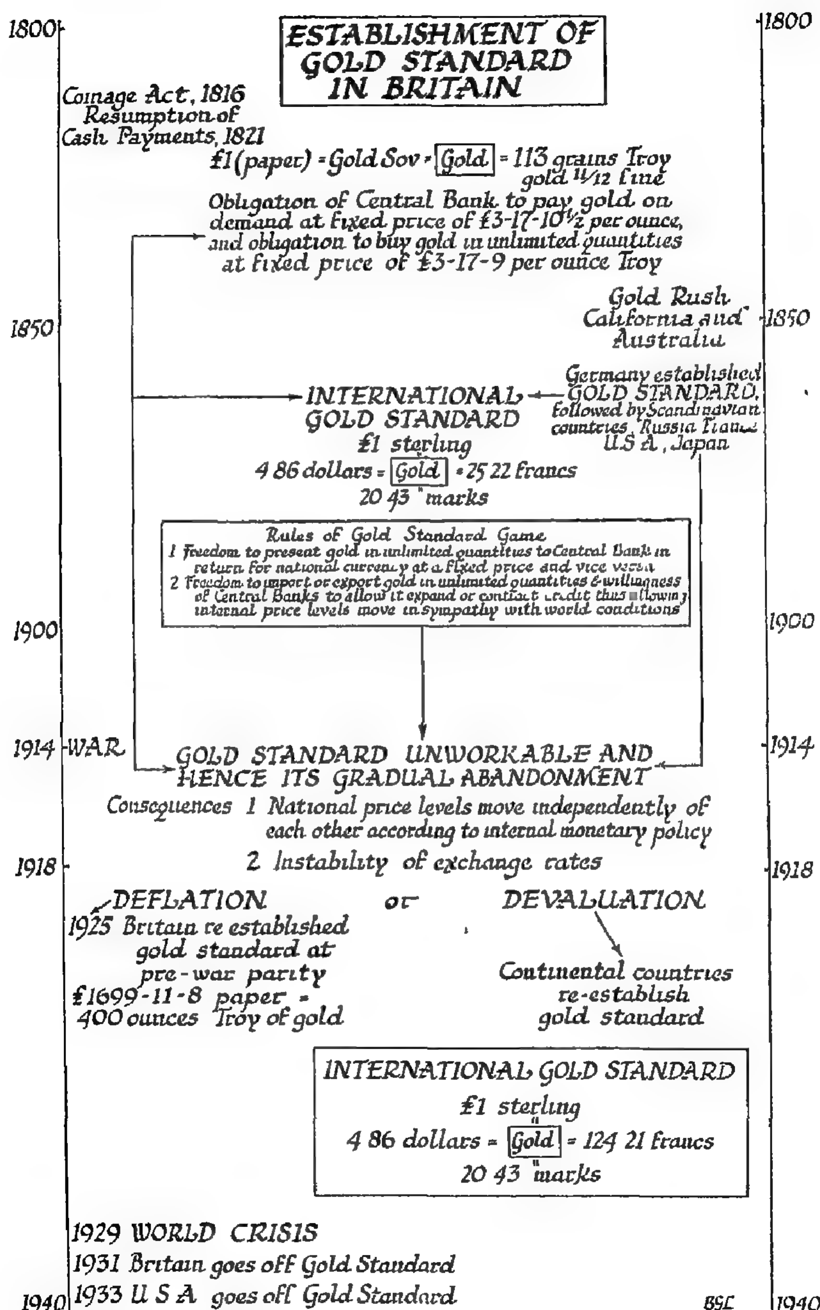
In view of the widespread dislocation of monetary standards caused by war finance, it is not surprising that so many regarded a return to the gold standard of pre-war days as the only sensible procedure. In Britain, the Cunliffe Committee reported unanimously in this sense. The practical problem proved to be extremely complicated, and there were different

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schools of thought about how to re-establish the gold standard. One might struggle painfully to restore the old level by making paper more valuable (*deflation*), and thus establish equality between the gold pound and the paper pound. Or, believing that such a process would be disastrous, one might settle on a new standard (*devaluation*). Belgium, France and Italy adopted the second alternative, but Britain, despite many powerful advocates of devaluation, adopted the first. By a process of deflation, the pound was restored to the old parity, but with disastrous results Prices tumbled, increasing the real burden of the National Debt, benefiting lenders and the *rentier* class, heavily penalizing the working class, and bringing unemployment in its train. Since costs (wages, raw materials, etc.) did not fall so quickly as prices, industries dependent on foreign markets suffered acutely. The result was depressed areas. In 1925 the monetary purists could at last rub their hands. The pound again looked the dollar in the face, and the gold standard was re-established by Act of Parliament. Unlike that of 1816, the standard now established was a gold bullion standard. Gold coins were withdrawn from circulation, but paper could always be converted into gold in the ratio of 400 ounces (Troy) for £1,699 11s. 8d. sterling. Permission to export and import freely was granted. Between 1923 and 1928, about thirty other countries went back to the gold standard.

But the new world was vastly different from the old. The machinery of the gold standard creaked and groaned. Eventually it ceased to work. International public debts clogged the workings of foreign trade, while a wave of nationalism put fresh obstacles in the path of commerce. A major reason for the success of the gold standard operated before the war of 1914–18 is that Britain, the great creditor nation, was always willing to accept payment of interest and capital in goods. If a debtor country cannot pay in goods, it must export gold, with disastrous results. The reserves of its central bank are depleted, and sooner or later its whole financial structure becomes insecure. The climax is a declaration that the country in question cannot permit any further export of gold. It then goes off the gold standard. This was the experience of the raw-material producing countries in the world crisis of 1929–32. By its policy of protection, America saw its imports of gold increase to an embarrassing extent. Had it permitted the gold to affect purchasing power, according to the rules of the gold standard game, prices would have soared and exports would have fallen Instead, it hoarded gold The precious metal so laboriously raised from the mines of South Africa was shipped to New York and returned to the earth, whence it came. The vaults of the Federal Bank were crammed with the golden ingots to which the country rightly refused to bend the knee

The United States had a stock of 4,593m dollars of monetary gold in 1930 out of a world total of 11,546m dollars. France, too, was hoarding gold, while London and other countries saw their reserves shrink. Torn between the desire to be orthodox financiers, maintaining the gold standard at all costs, and to be realists and men of the world by abandoning it, the Labour Party, then in power in Britain, did little to stem the tide of disaster. Conservatives, anxious to make domestic capital out of a situation of international scope, declared that the country was heading straight for disaster through



TIME CHART 12. THE GOLD STANDARD

the extravagance of a socialist administration. The National Government got in, ostensibly to save the situation. It abandoned the gold standard in November 1931, two months after taking office. Soon other countries had to follow suit, and early in 1933 the United States joined them. Within twenty years gold was twice deposed from its position. The money machine could no longer carry on by its own steam. It is unlikely that it will ever again be left to the inscrutable and unpredictable pressure of gold as its working fuel

THE MONEY MARKET

As the central bank, the Bank of England is not only in command of the money machine of this country, but, as the chief pillar of the London money market, can exert a deep influence on trade and finance throughout the world in peace time. The crisis of 1931 demonstrated how extensive is the financial web which spreads over capitalist countries, linked together, as they are, by foreign trade, capital investment, and interest payments. In all the financial dealings involved in the transfer of goods from one part of the world to another, the London money market plays a leading role.

For centuries the *venue* of financiers, Lombard Street was still the heart of the money market when war broke out again in 1939. The money sold in this market is short-term credit. In its provision the Bank of England, the joint stock banks, the discounting houses and accepting houses, are all concerned. The demand for most of this short-term credit comes from foreign trade, and the document most commonly used is the bill of exchange. The exporter draws a bill of exchange on the importer for the value of the goods. The bill is then sent to the importer for his signature—his "acceptance"—to signify that he takes responsibility for the payment of the bill at maturity. Since his signature may not be a sufficient guarantee that the bill will be met, financial institutions called accepting houses have come into existence. The common practice, therefore, is for a bill to be "accepted" by an accepting house, which thereby guarantees the bill. Naturally they only accept bills for those for whose credit they have good assurance. The exporter now possesses a bill, payable in three months' time, and guaranteed by a reputable financial house. Generally he is not prepared to wait for three months before getting his cash, so he discounts his bill, that is, he gets the present value of it.

The ordinary commercial banks used to play an important part in accepting and discounting bills. They still do a large amount of this work, but of late the transactions have got more and more into the hands of special institutions, called accepting houses and discount houses. Since the limited liability legislation of last century, the work of discounting has increasingly passed into the hands of large firms. In the mid-eighties the Union, the National, and about a score of private firms, made up the discount houses of the time.* According to the Macmillan Report, the Discount Market of London consisted in 1931 of three public companies with capital and reserves amounting to over 6m pounds, four private companies with a capital of

* Clapham, ii, 355.

about 1½m pounds, seventeen private firms and eight running brokers with a capital of roughly 8m pounds. The capital of these discount houses is invested in securities and used to guarantee loans granted them by the banks. The funds employed in the actual discounting of bills are thus obtained from the banks and other financial houses. It is in these short-term advances that the banks invest their liquid resources (Macmillan Report, 43). The Bank of England is the presiding judge over the money market. In effect, it is the bank which regulates the supply of credit to the market. Last century, when the commercial banks had so extended credit as to be unable to provide more funds for the market, bill brokers went to the Bank of England. By raising the rate of discount (the bank rate), the Bank checked borrowing, and at the same time attracted funds from home and foreign sources. By lowering the rate, it encouraged borrowing and discouraged depositing

Thus the development of the banking system of Britain has been towards unification and centralized control under the Bank of England. Amalgamation has concentrated most banking in England, and some in Scotland, in the hands of the "Big Five"—the Midland, the Westminster, Barclays, Lloyds, and the National Provincial (see Sykes, *Amalgamation Movement in Banking*) Finance has become so powerful a force in the world that it can wreck governments and determine social and foreign policy. Its traditional conservatism, the belief in "sound money," inclines its officers to adopt a policy of reaction in the face of rapidly changing economic circumstances. An institution such as the Bank of England, which holds the financial destinies of Britain in its hands, therefore wields a power too vast to be left in the control of private enterprise; but the transference of the Bank of England to the State, now effected in 1946, will not of itself solve the problem of distribution in an age of plenty; nor, indeed, will any scheme for controlling the money machine propounded by financial heretics, who at all times of depression get a hearing for their proposals, provide a panacea for the sickness of an acquisitive society A monetary policy designed to keep the pound steady will be incomplete unless linked to real costs in industry. In face of falling prices due to technological advances, it is a crowning folly to prevent prices from falling by pumping money into the system. The public control of the money machine is essential in a planned society which aims at the full utilization of our material and human resources for the good of the people; but its effective control calls for radical changes of the machinery for producing and distributing the things of which money is merely a token.

CHAPTER X

COMMERCE AND FOREIGN INVESTMENT

THERE was a time when the foreign trade of Britain was in the hands of Germans, French and Italians. Being concerned mainly with agriculture and the manufacture of simple goods for their own consumption, the English and the Scots were willing to allow foreigners to bring to their shores the costly articles of medieval commerce. These foreigners had trading privileges in London and other ports, as the Great Powers possessed until recently rights in the Treaty Ports of China England began to exploit the possibilities of foreign trade before Elizabeth's reign. By the end of it the last of the foreign privileged traders had been expelled. Then it was that the first great trading company—the East India Company—began its career of more than two centuries. Its foundation indicates the beginning of a new era. No longer willing to recognize the claims of the Portuguese to the exclusive right of trade with India and the Far East, London merchants sent their own ships round the Cape, and the Company had soon established trading stations in India, on the Persian Gulf, and in the Spice Islands. About the same time, other Englishmen were planning an overseas empire In 1609, the Company of Virginia was incorporated. In the days of James I, England set out in earnest on overseas trade, colonization, and capital investment. Long before the industrial revolution, Britain had become a great commercial nation, with far-flung possessions and an extensive commerce.

At first the overseas trade was mainly in goods such as silks, cottons, tapestries, and spices from the east, and tobacco from the west. Before 1700 this trade was having a profound influence on social standards and economic organization in Britain. Contemporary writers of the Restoration period point out how fashions in dress and furnishings were changing rapidly as the more highly finished products of India came to these shores. These changes worked their way down through society. Ordinary people were coming to prefer cottons to the traditional homespun. Diet was changing. The tables of the upper and middle classes now had tea, sugar, coffee The smell of tobacco was too familiar to attract attention.

Growing foreign trade brought great wealth to those engaged in it. Many were the fortunes made in the East India trade and in the tobacco and sugar traffic with the American colonies. Standards of living rose, and this fed the demand for the products of east and west. Fired by such example, lesser people copied the new fashions in dress and the new style of living. As demand for these products spread throughout society, prices fell. What hitherto had been for the purse of the wealthy alone, now reached craftsmen and even peasants. The new commerce, so profoundly influencing social customs, stimulated manufacturing industries, especially those catering for the household and for the needs of the colonists The Scottish linen industry as well as the Glasgow hardware industry found an expanding market for

their products in North America. Manchester fustians and Birmingham trinkets were shipped in large quantities to Africa (Fig 46).

THE EXTENT AND COURSE OF FOREIGN TRADE

In 1720 the imports of Great Britain amounted to 6m pounds, and exports to about 7m pounds. Forty years later, imports had nearly doubled, and exports had more than doubled. These statistics of overseas trade were the Official Custom House Valuations, according to which goods were valued not at their market prices, but at certain official values laid down in 1697, when the office of Inspector-General of Imports and Exports was first created They therefore indicate the volume rather than the value of traffic. Such figures continued to be published in this form down to 1854, but from 1799 they were supplemented by others of "declared values" based on current prices.*

Rapid increase of exports was in part due to the growth of a large re-export trade. According to the Navigation Acts, certain colonial products had first to be shipped to Britain before going to their final destination. Out of a total export trade of 16m pounds in 1784, 5m pounds of goods were re-exports to the Continent and to Ireland. The striking feature of Scotland's trade at this time was the very high proportion of imports that were re-exported. In 1771 the total imports were £1,386,369 and the re-exports £1,353,861, the home-produced exports being only £503,473. Scotland's prosperity was bound up with commerce, and narrowly on two commodities, tobacco and sugar.† Down to the American War of Independence, the commodities of overseas commerce were few in number and the markets mainly the British possessions. From the West Indies and the American colonies came tobacco, sugar, rice, tar and wood From India, textile goods, spices, and tea. British manufactured goods found a ready market in America, but until Lancashire built up a great cotton industry, outward-bound ships to India found it difficult to get cargoes. All the time trade with Europe expanded and was of the first importance.

THE INDUSTRIAL REVOLUTION AND COMMERCE

The expansion of commerce in the two centuries preceding the Napoleonic Wars was one of the main causes of the industrial revolution. The new markets stimulated industrial development, and the capital accumulated in commerce overflowed into industry It was, says the late George Unwin, "by a flow of capital inwards from commerce, that most of the early industrial enterprises of Lancashire were started, and that the immense expansion of the cotton industry was rendered possible."‡ Enriched by their profits in the tobacco trade, Glasgow tobacco lords purchased estates and helped to finance the new cotton industry. In the first half of the nineteenth century the volume of British exports at least trebled, while the price-level fell by one-half.§ Such rapid advance was not uniform. After 1815 there was a

* G. D H Cole, *British Trade and Industry*, 1932, pp 38–9.
† Scott, *Econ. Hist. Rev*, ii, No 2, 292–3
‡ *Econ. Hist. Rev.*, January 1927, 56.
§ Cole, 52.

serious set-back, due to the dislocation resulting from the Napoleonic War, and the deflationary policy of the Bank of England. Not until a year or so after the resumption of cash payments in 1821 did trade begin to pick up. Thereafter there were periodic crises and depressions.

The year 1825 saw a first-class crisis brought on by too rapid expansion and, more especially, by speculation in the newly-created republics of South America. Foreign loans were readily subscribed, and grandiose schemes were floated. Banks failed, and many commercial companies had to go into liquidation. By 1833 the sky had cleared. For a few years there was a boom in industry and overseas trade and investment, only to be followed by another crisis in 1837, when there was widespread unemployment in the manufacturing districts. The recovery of 1839 was followed by the "hungry forties." Trade recovered in 1843, only to crash again in 1847. There were thus many ups and downs, but over all there was remarkable expansion in industrial output and in commercial activity

More striking than the great increase in volume of foreign trade is its change of character. The expansion of the cotton industry is seen in the new and important place occupied by its raw material in our imports. In 1760, just before power-production was ready to multiply the output of this industry many times, the import of raw cotton was about 8,000 tons. By 1800 it had risen to 25,000 tons; by 1825–30, to an average of more than 100,000 tons; and by 1849, to 346,000. Before 1800 supplies had mostly come from the Levant, the West Indies, and Guiana. Following the adoption of Witney's cotton-gin, the slave plantations of the United States easily out-distanced all other sources. By 1826–30 the United States were supplying three-quarters of all the cotton consumed in the United Kingdom.*

Imports of wool were small, though increasing. England had only just begun to supplement her home supplies from overseas sources. Australia was thereby drawn into the economic web of which London was the centre. In 1806, 245 lb. of wool were imported from New Holland (Australia). This was the beginning. The bulk of the extraneous supplies were still obtained from Saxony and Silesia Through the enterprise of John MacArthur, captain of the convict garrison at Port Philip, an improved breed of sheep was now being reared on the new continent. Thereafter, imports of wool steadily rose Soon Australia entered on a remarkable phase of economic expansion, when sheep-farmer and squatter held the stage (see below, p 402). The import of wool (Spanish, German and Australian) rose from 11,000 tons in the late twenties to over 33,000 tons in 1849. The only other textile raw material was flax, the import of which grew with adoption of power-spinning in the thirties and forties. Timber was still an impressive item in the import trade, because still the essential raw material of the shipbuilding industry. In bulk it was very important. In value it ranged in the late thirties between 3 and 4m pounds. Together the imports of cotton, wool and timber amounted to about 20m pounds, at a time when British exports were well under 50m pounds.† Imports of sugar, tea and coffee were severely handicapped by heavy taxation, but priority in sources of supply gave

* Clapham, i, 241-2. † Ibid, 479

British shippers a large share in the carrying trade of Europe. London still retained an extensive entrepôt trade.

These imports were paid for by the export of manufactured goods and the re-export of colonial produce. The predominance of cotton yarn twist and piece goods in the export trade reflects the growth of the cotton industry of Lancashire and Scotland. Before 1800 the ancient woollen industry furnished the chief export. Now it was far surpassed by the cotton industry, whose products rose from about one-seventh to one-half of the total export trade in the first half of the century. "It is not surprising," says Clapham (1, 479), "that Britain's foreign trade presented itself almost as a problem in cotton, or that Manchester claimed a great share in the determination of the commercial—and industrial and social—policy of the country." Coal, iron and steel occupied an extremely small, though growing, proportion of the export trade. In 1830 the largest single customer for British goods was the United States, which took £6,100,000's worth out of a total export of £38,200,000, and much of it was in cotton goods. European countries together took £15,600,000; Asia, £4,100,000; all Africa, £744,000, Australia, £300,000, the British North American colonies, £1,900,000; the British West Indies, £2,800,000; and South America, with Mexico, £5,200,000. In short, the bulk of the exports went to the cotton, sugar and timber-producing countries, as well as to the South American republics which had acquired purchasing power by heavy borrowing in the London market.*

THE ADOPTION OF FREE TRADE

The need to regulate foreign trade, so as to assure a favourable balance, was a favourite maxim of mercantilists in the two centuries that preceded the industrial revolution Duties were heaped on duties with the object of restricting imports and preventing the export of vital materials Britain, of course, was not the only country which checked the free flow of trade. Germany, France, and other European countries piled their barriers so high that trade was practically impossible, except by smuggling So determined was France to protect her own home market that she made it illegal to import textile yarns or fabrics of any kind. In 1810 Russia prohibited the entry of all foreign manufactures (Fig 47).

In his *Wealth of Nations* (1776), Adam Smith had mercilessly criticized this fiscal policy. He wrote at a time when Britain was on the threshold of industrialism, and he showed the great advantages that would follow from division of labour and specialization. He urged that exchange is a mutually beneficial process. So artificial restrictions on the free flow of goods are detrimental to national interests. He laid bare the real nature of foreign trade, and showed how it rested on international division of labour, by which "the different states into which a great continent was divided would so far resemble the different provinces of a great empire." The Eden Treaty of 1786, which reduced duties on trade between France and Britain, was a first fruit of the new outlook; but the Napoleonic War checked the movement. When peace returned, efforts were once more directed to freeing the channels

* Clapham, 1, 250.

of trade. The growing industrialization of Britain gave her manufacturers a vested interest in free trade. They had nothing to fear from foreign competition. Indeed, a free trade Britain might even encourage foreigners to lower their tariffs, and so open still wider markets for British products. The protected markets, for the most part, lay in Europe. Elsewhere in the tropics and sub-tropics, markets were unprotected and unlimited. Manchester, says Clapham, "lived on 'shirts for black men,' and yellow men, and brown men, and for the Moslem world."

A London Merchants' *Free Trade Petition* of 1820 marks the starting-point of the resumed fight for free trade. It is as follows:

The Petition, *etc.*
Humbly sheweth

That foreign commerce is eminently conducive to the wealth and prosperity of a country, by enabling it to import the commodities for the production of which the soil, climate, capital and industry of other countries are best calculated, and to export in payment those articles for which its own situation is better adapted.

That freedom from restraint is calculated to give the utmost extension to foreign trade, and the best direction to the capital and industry of the country.

That the maxim of buying in the cheapest market and selling in the dearest, which regulates every merchant in his individual dealings, is strictly applicable as the best rule for the trade of the whole nation.

That a policy founded on these principles would render the commerce of the world an interchange of mutual advantages, and diffuse an increase of wealth and enjoyments among the inhabitants of each State (quoted *English Economic History, Select Documents*, 698)

Two leaders of the movement were Huskisson (President of the Board of Trade, 1823–7) and Peel (Prime Minister, 1841–6). Huskisson revised the tariff system by abolishing prohibitions and prohibitive duties, substituting moderate duties not exceeding 30 per cent *ad valorem*. The obnoxious Corn Laws alone remained intact, because it was impolitic to interfere with a duty so whole-heartedly supported by the landed and farming interests. Huskisson also revised the Navigation Acts, and concluded reciprocity treaties with many European countries, thus removing restrictions on shipping on the basis of mutual concessions. More concerned with administrative than financial reform, the Whig Government of 1830–41 made no important contribution to the free trade movement, and when Peel took office as Tory Prime Minister in 1841, reform was urgent The Committee on Import Duties of 1840 laid bare a chaotic state of affairs. They showed that the duties on seventeen kinds of articles alone produced no less than 94·5 per cent of the total customs revenue Yet there were nearly nine hundred kinds of articles on the customs list at this time. Of these, 147 yielded no net revenue, and 349 produced only about £8,000. The Committee proposed the concentration of customs duties on those articles which yielded revenue. Such a reform would not only help trade and benefit the revenue,

"but would at the same time greatly diminish the cost of collection, remove multitudinous sources of complaint and vexation . . . and consolidate the

great interests of peace and commerce by associating them intimately with the prosperity of the whole family of nations" (quoted Redford, *The Economic History of England*, 1931, 175).

Other changes followed in 1842 and 1845 In the former year a maximum rate of 5 per cent on imported raw materials, and of 20 on manufactured goods, was fixed. In the latter, 520 customs duties (including duties on bulrushes, canaries, fossils, and manna) and all the remaining export duties were abolished. Meantime the agitation for the repeal of the Corn Laws was reaching its climax. It was supported whole-heartedly by the labouring classes as well as by manufacturers, who allegedly believed that cheap food would mean cheap labour. The Anti-Corn Law League, founded in Manchester in 1838, under the leadership of Cobden and Bright carried on propaganda throughout the length and breadth of the land. While food was dear, interest was aroused and passions inflamed, but when trade improved the movement lost support In the end, the catastrophe of the potato famine in Ireland during 1845 made the success of their campaign inevitable. The Government was forced to suspend the Corn Laws. Peel realized that once suspended they could never be re-imposed. In 1846 Parliament repealed them.

The final stage in Britain's adoption of free trade was carried through by Gladstone, himself a disciple of Peel. In his budget of 1853 he freed 123 articles from customs duties and reduced the rates on 133 others Fully manufactured goods were not to be charged more than 10 per cent. In 1860 he added further articles to the free list, and in the relatively few cases (there were only 48 dutiable articles) where tariffs remained, they were retained for revenue rather than for protective purposes. The year 1860 is also important for the conclusion of the Cobden-Chevalier Treaty between Britain and France. Britain agreed to abolish all duties on manufactured goods, and to reduce the duties on wines and brandy. France, on the other hand, abolished all prohibitions, and lowered the duties on British coal, iron, steel and machinery and textiles Britain did not limit her concessions to France. She extended them to all countries. For the next seventy years the United Kingdom remained a free trade country.*

VICTORIAN PROSPERITY

Between the repeal of the Corn Laws in 1846 and the beginnings of the Great Depression in 1873, Britain experienced great industrial and commercial prosperity. When the Great Exhibition took place in 1851, Britain stood confident before the world, assured of her ability to supply any market and certain of her ability to meet the competition of any country. She could open her ports to foreign produce, knowing full well that she need fear no rival in the market for manufactured goods. Twenty years later, statistics of her exports and imports, of her production of coal, iron, steel and cotton goods, showed a phenomenal expansion. In 1854 exports were valued at 97m pounds. In 1873 they stood at over 200m pounds Imports in the former

* For an excellent short account of the Free Trade Movement, see Redford, Ch. XIII

year were 152, and in the latter, more than 370m pounds. Even allowing for a small rise of about 7 per cent in prices between these dates, the increase in foreign trade is considerable. Figures for industrial production are equally striking Coal production rose from 65m tons in 1854 to over 130m tons in 1875, and pig-iron from 3 to 6m tons. Starting at a very low level, production of steel rose fourfold between 1850 and 1870, then threefold by 1875, and again twofold by 1881. The yardage of cotton cloth rose by 130 per cent between 1850 and 1870, and by 200 per cent between 1850 and 1880. The clearance of ships from British ports rose from 9,500,000 tons to 23,500,000 tons between 1854 and 1875, and these figures underestimate the increase. Owing to the use of the steamer at the latter date, shipping was much more efficient (Cole, 74–5).

Every acceptable index points to unprecedented prosperity. This was the hey-day of capitalism in Britain. Small wonder that the Victorian individualist and man of affairs waxed eloquent on the virtues of capitalism. Britain appeared to have established an economic system which was without rival by all known tests. Its expanding production seemed to hold opportunities of service and wealth for everyone; but there is another side to this picture. The standard of living had risen, it is true; but there was a vast amount of poverty, ill-health, malnutrition, and overwork.

"To whom, then, is this wealth of England wealth?" cried Carlyle. "Who is it that it blesses, makes happier, wiser, beautifuller, in any way better? Who has got hold of it, to make it fetch and carry for him, like a true servant, not like a false mock-servant, to do him any real service whatsoever? As yet no one. We have more riches than any Nation ever had before, we have less good of them than any Nation ever had before. Our successful industry is hitherto unsuccessful; a strange success, if we stop here! In the midst of plethoric plenty the people perish; with gold walls, and full barns, no man feels himself safe or satisfied" (*Past and Present*, 75).

These were no idle words; nor was Carlyle alone among those who challenged the complacency of the Victorians. Ruskin put it thus. "The question for the nation is not how much labour it employs, but how much life it produces. For as consumption is the end and aim of production, so life is the end and aim of consumption." Tremendous increase in production was sufficiently evident. Its causes were many, but two stand out. Technological advances and improved organization were everywhere reducing costs, so swiftly indeed that the tremendous capacity of mill and factory seemed to hold out untold possibilities for the human race. It was also a time of rising prices. Australia and California were increasing the gold supply of the world, thus stimulating their own demand for goods and giving a fillip to industry in Britain.

During this golden age of Victorian industrialism, Britain's ties with other countries were increasing daily, and London was strengthening its position as the economic capital of the world. The interdependence of her industries on foreign sources of materials and markets was becoming closer as railway and steamship reduced freights and abolished isolation Britain had become an industrial country, buying her raw materials by the export

of manufactured goods. She could still produce a high proportion of her food, but she could not do without foreign imports for long The proportion she had to import was steadily rising. Probably about 25 per cent of the bread corn consumed in Britain in 1850–2 was imported, mainly from Russia Ten years later it was nearing 40 per cent. By the end of the seventies it exceeded 50 per cent. The Crimean War interrupted the wheat trade with Russia, but by this time the United States, now feverishly building railways, was increasing her exports of wheat and flour. The Civil War postponed America's conquest of the British food market, but "the dominance of the United States was unquestioned" by the seventies. In 1881 almost two-thirds of Britain's requirements of wheat and flour came from this source Because of their perishable nature, imports of meat were less considerable. In 1884–6 the United Kingdom still possessed about 10,700,000 head of cattle. In those years she imported on an average only 372,000 head and 53,000 tons of beef; and beef imports on this scale were comparatively recent. In the last decade of the century, however, chilled and frozen meat began to pour in as vessels were equipped with refrigerating plant.*

Thus Britain's dependence on foreign supplies of food became more and more marked as industrialism advanced. Of the raw materials imported, cotton was by far the largest item In her early industrial days Lancashire had drawn her raw materials from many countries. Between 1820 and 1850 the United States had become the most important source. In 1820 she dispatched more than half the cotton requirements of Britain. By 1830 she was sending three-quarters, and was the only country keeping pace with the world's tremendous consumption of cotton goods. Naturally Lancashire was a little alarmed at so great dependence on a single source of supply, and she had reason to regret it when the American Civil War broke out in 1861. Feverish efforts were made to find alternative sources, but the contribution of such new sources as India, Egypt and Brazil were still small when the war was over. By 1870 America was once more supplying half of the British requirements, and by 1880–4, 74 per cent. Because of wheat and cotton, Britain's ties with the United States were close indeed. Together they accounted for nearly a quarter of her total imports.

During this period the cotton industry was still Britain's greatest industry, and cotton goods her greatest export. Next to cotton came wool Together they accounted for 60 per cent (in value) of the exports of the United Kingdom in 1850. As the century drew to its close, the proportion tended to drop, but as late as 1880–4 it still averaged 46 per cent The significant fact of Britain's trade at this time was the export of consumable goods which had to be continually renewed. Britain was in fact clothing the world. As we have seen, Australia was sending wool to England in the twenties, and by the time of the Great Exhibition she was supplying the bulk of Britain's demands. The jute industry of Dundee was now based on Indian jute. Another trade link with the Empire had been forged.

* Clapham, ii, 218–19.

UNITED KINGDOM IMPORTS IN MILLION LBS. ANNUAL AVERAGE

(Clapham, ii, 225)

	Cotton	Wool	Flax	Hemp	Jute
1850–4	825 0	95·2	175 5	107·6	48·4*
1860–4	946·4	167 2	176 2	102·9	132 9
1870–4	1,524·3	307 0	265·0	132·8	420 3
1880–4	1,714·7	486 0	215·7	150·6	616·3

* Three years only.

Meantime the mining and metallurgical industries were also increasing their quota of exports. The export of coal, mainly to Europe and the Mediterranean, rose from 1m tons at the accession of Queen Victoria to between 3m and 4m tons in the early fifties, and to over 20m in the quinquennium 1880–4.* Exports of iron, steel and machinery rose rapidly though erratically, being affected by bouts of railway building abroad, and by tariffs as countries protected their infant metal industries. In 1848 their value stood at only 6m pounds, by 1870 the figure was 29½m, and in 1873 46m. Important as these exports were, they were easily dwarfed by the export of textiles, though the proportion was changing in favour of iron and steel. The following table shows the relative importance of the principal exports:

ANNUAL AVERAGE VALUES, 1880–4
(Clapham, ii, 229)

Of all British and Irish produce exported	£234,000,000
Of all yarns and textile fabrics	108,000,000
(Of which cotton	76,000,000)
Of coal, iron and steel	38,000,000
Of hardware, cutlery and machinery	15,000,000
Of articles of clothing	10,500,000
Of foodstuffs	10,000,000
Of chemicals and salt	6,200,000

Down to the eighties a third of British exports went to the Empire. The largest customer was India, which experienced rapid economic development under the stimulus of British capital after the Mutiny. Outside the Empire, the United States was by far the most important. It took from Britain fine cottons, linens, woollens and miscellaneous goods, as well as steel rails and machinery. It was, however, a variable market, for American economic life with its booms and depressions, its Civil War and its tariffs, did not offer an easy market at all times, like Germany, whose rapid economic development brought about increased consuming power. Down to the eighties Germany not only bought large quantities of British goods, but she obtained her overseas products through the London market.

* Clapham, ii, 226.

THE GREAT DEPRESSION

The last quarter of the nineteenth century witnessed a remarkable expansion of the output of food, raw materials and manufactured goods throughout the world. It was a phase of very rapid economic expansion, so rapid in fact that the economic machine suffered from repeated strains and stresses Between 1872 and 1896 there were three slumps and two intervening periods of recovery There was much talk about depression, and in some years unemployment rose to alarming heights As foodstuffs poured into Britain from the United States, land went out of cultivation The farming community suffered severely The prospect was so black that the period has been called "the Great Depression," though population and trade did in fact continue to advance phenomenally. "The outstanding fact, or group of facts, in the quarter-century," says Beales,* "was the rapid industrialization of other countries and the further industrialization of this " Between the early seventies and the late nineties, coal production in Britain rose from an average of 121m tons to 202m tons, in the United States from 43m to 189m tons, and in Germany from 32m to 89m tons. Steel production rose in Great Britain from 500,000 tons to 4,200,000 tons; in the United States and Germany from a negligible amount to 7½m tons and 5m tons respectively †

Britain's industrial supremacy received a challenge when Germany and the United States got into their stride. Feverish search for markets resulted in the partition of Africa and a struggle for supremacy in China. It also promoted tariff walls around almost every country, now eager to protect itself from the avalanche of goods which the ingenuity of man had shown how to produce. Though Britain stuck to free trade, there were also voices for "Fair Trade," as it was called; and Joseph Chamberlain launched his great Tariff Reform Campaign in favour of protection for British industry and trade within the Empire at the opening of the present century. Despite strong public opinion in favour of free trade, the Conservative Party adopted protection as their platform Most of the arguments advanced in its favour were wrong-headed, but they had at least one redeeming feature. Tariff Reform was a challenge to the old *laissez-faire* doctrine, by this time losing its grip on internal affairs. It pointed the way to a more rational organization of foreign trade than the senseless and wasteful competition that closed the Victorian era. Shipping control during the war of 1914–18 showed how much could be done to eliminate waste and plan international trade on efficient lines.

In spite of formidable competition from other countries now industrialized, Britain increased her foreign trade at a rapid pace till the outbreak of war in 1914. Between 1896 and 1913 her exports increased in value by 119 per cent, while wholesale prices rose by 39 per cent, and retail food prices by about 25 per cent. Everywhere, markets showed a capacity to absorb more and more British goods. Between 1896 and 1913 the value of British domestic exports to Canada rose more than fourfold, to the Argentine more than

* *Econ. Hist. Rev* , October 1934, 73.

† Cole, 86.

threefold, and more than doubled to France, Holland, Russia, Italy, China, Japan, India, and New Zealand. Even in the heavily-protected American market, British exports increased by 43 per cent. During the years before the war of 1914–18, Britain was regularly exporting one-third of all she produced. Part of her increased exports was due to the investment of capital overseas. This is reflected in the kinds of goods exported. Textiles, and especially cottons, still remained the chief item of export trade, but they were losing their pre-eminence. In 1896 they accounted for 39 per cent, and in 1913, 31 per cent of the exports of the United Kingdom. Coal, iron, steel and machinery, on the other hand, increased their share from 23 per cent in 1896 to 27 per cent in 1913.* A testing time was yet to come for Lancashire; but before 1914 prospects were still bright. There seemed to be an insatiable demand for cotton goods throughout the world; but a country which exported cotton machinery could not expect to retain her markets for cotton fabrics indefinitely. The cotton mills of India and Japan, largely equipped and directed by Lancashire labour, were a silent challenge to British exports in the Far East.

EXPANDING MARKETS

Many circumstances combined to bring about this prodigious and prodigal expansion of commerce. World population rose from 836m in 1800 to 1,551m in 1900.† In Europe especially there was a steady rise of the standard of living. In the same period the value of international commerce increased about twentyfold. So the greater number of consumers is not sufficient to account for the tremendous growth of trade. There must have been other agencies at work. One was that movement of exchange was facilitated by removal of restrictions on trade. Within Britain regional trade barriers had long since disappeared, though the old mercantilist restrictions on commerce did not disappear until the Victorian era. In Europe the steady unification of the German states, beginning with the Zollverein or Customs Union in 1834 and culminating in the creation of the German Empire in 1871, freed trade within a large area of Europe from age-old restrictions Outside of Europe markets opened up in South America and the Far East. Ever since the Great Discoveries South America had been dominated by Spain and Portugal. Now, as the colonies achieved their independence, a stranglehold on their trade maintained by their conquerors relaxed. Trade with Brazil was thrown open in 1807. Soon afterwards Mexico and Latin America followed suit. The abolition of the East India Company's monopoly of trade to India in 1813, and to China in 1833, opened the door to the European merchant in the Orient (Figs. 48 and 49).

The wind-up of the East India Company's monopoly of trade was immediately followed by a rush of British merchants to Canton, anxious to ship opium from the fields of Bengal. For many centuries China had been unwilling to admit the westerner to trade in his country In 1793 the Emperor of China wrote to George III: "I set no value on objects strange or ingenious

* Clapham, iii, 66; Cole, 102–3.
† *World Population*, by A. M. Carr-Saunders, 1936, 1921–30.

and have no use for your country's manufactures." The Opium War (1839–42) was at bottom an attempt to compel China by force to admit European manufactures. As a result of the conflict, Britain received an indemnity, trading concessions in five Treaty Ports, and the possession of Hong Kong which soon became the commercial clearing-house of the East. China was forced to take Indian opium and western goods In 1856, another war was forced on China, and this time the French sided with the British. Canton, the emporium of the East, was bombarded, and western troops marched to the gates of Pekin. The Treaty of Pekin (1860) broke down the last rampart of China's exclusiveness. China had to take western traders and western civilization whether she wished them or not

Before 1854, when the guns of American warships compelled her to grant trading concessions, Japan had excluded European merchants more effectively than China. British and other European powers followed in the wake of the United States. Japan then decided to change her own civilization in her own way. After the Revolution of 1868, she swiftly remodelled her industries on western lines, and adopted the economic and financial devices of capitalist countries. Thus, taking a leaf out of the book of European nations, she made imperialist claims on China At the conclusion of the Sino-Japanese War in 1895, China had to recognize the independence of Korea and to cede to Japan the Island of Formosa with the strategically important Liao-tung Peninsula. This was a shock to the European Powers. Since 1891 Russia had been building her Trans-Siberian Railway to the Mongolian border, while France, having captured Tongking, aimed at bringing southern China under her influence. Germany and Britain were eagerly looking forward to their share in the spoils. The outcome was that western powers compelled Japan to give up the Liao-tung Peninsula and the harbour at Port Arthur. They then proceeded to help themselves Germany secured the lease of Kiao-chau, Russia Port Arthur, France Kwang-chau-wan, and Britain Wei-hai-wei. Before the close of the century, European powers were thus firmly entrenched in the Far East Britain was pouring its shiploads of cotton goods into China and bringing back tea.

The geographical framework of commerce extended enormously. Meanwhile movement of people across the face of the earth was unlocking new resources and increasing the purchasing power of new lands It has been estimated that about 55m people emigrated from Europe in the hundred years after Waterloo, and of that number, 19m came from Britain Most went to the United States, which absorbed 36m, South America took nearly 10m, and Canada over 4m. These peoples helped to develop the resources of lands to which they went, and likewise created large markets for the manufactured produce of the industrialized countries. Improved communications encouraged the process. Railways penetrated the interiors of continents and broke down the isolation of inland places.

A network of railways first grew up in Britain between 1825 and 1850. This encouraged exploitation of our mineral resources and enabled the produce of the countryside to be brought to the teeming population of the towns. In the continental areas of the world, the effect of railways was more dramatic. It placed Germany on the economic map of Europe, from which

she had been largely excluded since the traders of medieval times deserted the old routes for the wide ocean. As railroads reached out westwards, the various states in America came within a more closely-knit economic system. The product of the prairies now reached the ports for shipment to Europe. With the rest of the continent, Canada shared the benefits of better communications. The wheat-fields of Manitoba, Saskatchewan and Alberta were able to serve the needs of Britain.

The wheels of commerce speeded up as goods flowed along the steel railways, in steel wagons, for transport by fast steel steamers. The railways were at first more important than the steamer. The latter merely replaced sailing vessels. The former provided a means of communication between districts hitherto cut off from the main stream of economic activity. The progress of the steamer was slow. Steamships needed coaling stations, and long voyages called for technical improvements of marine engines and their boilers. So it was not until the close of the century that victory over the sailing-ship was complete. The Suez Canal, opened in 1869, created a new and shorter through route to the East; and great steel inventions, taken up simultaneously by Britain, Germany and America, led to a boom in shipbuilding with keen competition for freights. This made transport cheaper because the carrying capacity of the steel steamer was much more than that of the sailing-ship.

If the railways and the steamship routes were the arteries of commerce, the telegraph lines were the nerves. In the early fifties cables were being laid in shallow and narrow seas. Before the death of Victoria the world had been bound together by copper wires. Overland and beneath the seas, cables stretched across and between all the important countries. The railway, the steamship and the telegraph had made the world a smaller place.

THE NEW COMMERCE

Commercial development has been a process of geographical expansion. Markets have extended their scope from the local to the regional, from the regional to the national, and from the national to the international. Over the greater part of Europe most goods were bought and sold for many centuries in countless little markets to which the people of a district came once a week. There the produce of the countryside was exchanged for that of the towns. Many of these small markets survive for the sale of perishable commodities such as vegetables and dairy produce, but to-day their importance is trivial. At longer intervals there used to be fairs, to which merchants and travellers came from far afield bringing their wares with them. A typical example is the famous Stourbridge Fair, near Cambridge, described by Defoe in his *Tour Through Great Britain* in 1723. On the Continent there were great Fairs at Leipzig and Frankfurt in Germany, Dijon in France, Medina del Campo in Spain, Nijni-Novgorod in Russia.

The new transport of the nineteenth century completely revolutionized this scale of commercial operations. There was a change in the direction of trade as the railways created new routes throughout the continental areas of Europe and America. Germany now became an important highway of

trade between east and west Europe. In the United States and Canada the consequences were more far-reaching. Trade routes had previously run north and south, following the river valleys and the coast. The railways could run east and west Goods could be moved in bulk, cheaply and easily. Thenceforward, markets for some commodities, such as wheat, tea and rubber, embraced almost the whole world. As railways and steamships bound the world together, the European could draw his wheat from the United States, his tea from India and China, his wool from Australia, his cotton from Egypt, India and America. The whole world could contribute to the needs of the humblest family.

Movement of goods in bulk and an enormous expansion in the scope of commerce introduced new methods of buying and selling. The fairs disappeared one after another, or shrank in importance. Produce markets, such as the Liverpool Corn Exchange or the rubber, tea, coffee and sugar exchanges of London, or the Cotton Exchange of Manchester, took their place. These exchanges became the nerve centres of world markets, where goods were bought and sold merely by specimen or simply by specification. Along the telegraph lines and the cables passed news of crops, of the movement of goods, of stocks, of demands, and so on Within a single century the commercial traveller with his samples usurped the place of the itinerant merchant with his wagon of goods. One aspect of this changing order of commerce has been the appearance of the retail shop. There had been shops for many centuries, but they had been simply places where the producer or craftsman displayed the goods he had made Nearly all retail dealing was concentrated in the weekly market. The retail shop usurps the function of the market-place in the nineteenth century. As all this business of buying and selling increased, the proportion of people engaged in commerce rose. From being general stores, like those of the countryside to-day, shops began to specialize in particular classes of goods and to use every device to attract the attention of passers-by. The large shop with many departments, first found in Paris, was copied in the large towns of this country, in the last twenty years of the century And about the same time the multiple shop, with its small branches scattered throughout the length and breadth of the country, now became a familiar sight.

INTERNATIONAL INVESTMENT

British capital built railways in Europe, in the United States, in South America, in Canada, in India and in Australia It encircled the world with cables and telegraphs, and participated in the economic exploitation of many lands. It stimulated production at home, and helped overseas countries to send the raw material and food which Britain required. Till about 1850 the main field of British overseas investment was the continent of Europe. Loans made at first were not for railway building nor for productive enterprise, but to help needy governments. The Napoleonic Wars left France in 1815 with a large indemnity to pay, and an army of occupation to maintain They also left a considerable part of Europe in a state of bankruptcy and economic disorder. Banking houses, such as Barings and Rothschilds, with head-

quarters in London and with agents or relations in all the capitals of Europe, threw themselves into the business of reconstructing the finances of Europe. Loans raised in London went to reconstruct the economic life and restore the shattered finances of France, Prussia, Austria, Russia and Greece.

About the same time a steady stream of capital poured into Latin America. Many bond-holders burned their fingers in speculative enterprises, especially those who had ventured their capital in the infant Republics of South America. In Europe, too, there were heavy losses in Greece, Spain and Portugal. This outflow of capital did not necessarily involve the direct export of goods, because some European countries wanted gold; but in most cases goods moved, though not directly between borrower and lender. Loans to South America were reflected in increased exports of military and naval stores, of cotton goods and hardware, so that exports rose from a declared value of £2,800,000 in 1818 to £5,572,579 in 1824, and to £6,425,715 in 1825 * Then came the crash. One state after another defaulted

Between 1815 and 1830 at least 50m pounds were sent to Europe, more than 20m to Latin America, and between 5m and 6m to the United States This was only a fraction of what was yet to come. So far the leading role had been played by the great financial houses of London, Rothschilds, Barings, and Ricardo Soon investors up and down the country were engulfed in the process of home and overseas investment, but the financial world was still dominated by a relatively small number of people In railway-building on the Continent a few giants, such as Thomas Brassey, held the field. Trained as a road surveyor and estate agent, Brassey became a great railway contractor, and at the height of his power employed eighty thousand workmen, owned iron and rolling mills, locomotive and carriage works in England and France. A man of this calibre did not wait until asked by a company to construct a railway He planned lines, obtained concessions, and created companies. There was hardly a country in Europe which did not know his work. In the early railway age European countries were largely dependent on Britain. The railways of France were a triumph of Anglo-French enterprise Capital, skill, and organizing ability poured across the Channel By the early fifties the shares of twenty French railway companies were quoted on the London Stock Exchange, and at least one English director was on the board of nineteen of them (Jenks, 165).

INVESTMENT AND THE PUBLIC

Before the days of railways and factories there were few concerns which required much capital. Hence dealings in shares were very limited. From the end of the seventeenth century, and throughout the eighteenth, there was buying and selling of Bank of England, East India Company, South Sea Company, and Government stock; but these transactions touched a mere fringe of the population and only a very small section of the economic field. Brokers used at first to meet to transact business in the street or in odd coffee-houses. In 1762 the more influential ones fixed on Jonathan's Coffee House in Change Alley. Later they moved to a new building of

* L. H. Jenks, *The Migration of British Capital to 1875*, 1938, 59

their own. They called it the Stock Exchange. At first it was still something of a coffee-house. Then in 1802, professionally strengthened by the increase of the national debt and investments in canal building, its members moved, five hundred strong, to premises in Capel Court.

As company after company was promoted to build its few miles of line, the railway boom of the thirties and forties accustomed a larger public to stocks and shares. Tradesmen, manufacturers, pensioners, merchants, ladies of means—in short, the mass of the middle class—was now drawn irresistibly into the financial web. They invested their savings in railway stock. "The Stock Exchange," says Jenks, "joined the House of Commons as an institution upon which the common hopes and fears of the enfranchised classes centred." The Companies Acts of 1852–62, which granted incorporation by mere registration and limited liability, naturally gave a great fillip to joint stock enterprise and therefore to investment.

"For the five years ending in 1861," says Clapham (ii, 357), "the annual average was 381 Companies with a total nominal capital of £21,000,000. In 1864 there were registered 975 Companies with a nominal capital of £235,000,000; and the figures for 1865 were 1,014 and £203,000,000."

In all this business of investment, the Stock Exchange, with its stock brokers and jobbers, is the clearing-house. The Stock Exchange which is a market for buying and selling shares, is almost entirely a product of the last hundred years In the last quarter of the century, investment advanced by leaps and bounds, and with it the work of the Stock Exchange. Membership rose from a little over 2,000 in 1877 to over 5,500 in 1905. Meantime the main industrial centres of England and Scotland opened local stock exchanges to deal with an ever-increasing business of company promotion, and to provide a market for stocks and shares.

The business of foreign loans and companies was usually in the hands of specialist concerns called issuing houses. Starting as merchant houses with world-wide ramifications, they have added financial activities to their ordinary commercial business. Thus Baring Brothers traces its origin to a wool business of Devonshire at the end of the eighteenth century. Before 1800 they were woollen merchants trading from London overseas. From wool they extended to Russian furs and Chinese silks, and then to Anglo-American trade. They began to play an important part in international finance after the Napoleonic Wars. The Duc de Richelieu is reported to have said: "There are six Powers in Europe, Great Britain, France, Russia, Austria, Prussia, and Baring Brothers." Jenks, from whom this quotation comes,* adds: "Barings was a synonym for the investment market at London." The Rothschilds trace their origin to a goldsmith of Frankfurt Members of this house wove a web of finance over the continent of Europe, as the Fuggers had done three centuries before In the generation after the Napoleonic War they had an almost complete monopoly of public loans. In the second half of the century other great financial houses entered the field, and exercised a profound influence over the politics of Europe.

* *The Migration of British Capital*, 36.

"There was the firm of Frühling and Goschen, which had come from Leipsic in the book trade and in the second generation was inoculating London with Egyptian finance and was supplying a minister of state. C J. Hambro and Son, after a century of distinction in banking at Copenhagen, opened a London house after the revolutions of 1848, and became Anglicized. This firm was in 1870 the leading one in the Scandinavian trade, and was at different times pre-eminent in Italian relations. J S. Morgan and Company, succeeding to the business of George Peabody during the Civil War, was a firm so English in character that it headed the London syndicate which offered the only serious competition to the Rothschilds for handling the French indemnity loan in 1871" (Jenks, 267).

BRITISH OVERSEAS INVESTMENTS

As the first stage of railway construction ended in western Europe, British capital had to look farther afield for investment. Railway building in France, Belgium, and Germany continued after 1850, but fewer lines were built by British enterprise. Moreover, steady improvement of transport was helping to create competitive conditions for British industry, as Europe itself embraced industrialism. From the fifties, the outflow of capital to eastern Europe, South America, the United States, Canada and India increased. In this movement there was more direct control from London, especially with respect to South America, Canada, and India, where administrative and financial skill was lacking.

The construction of railways in the Americas and in India increased the world's stock of raw materials and food. Wheat, cotton, rubber, and a score of other raw materials poured back into Europe, facilitating industrial expansion and increasing foreign trade. Since the bulk of the capital came from Britain, her economic system was enriched. There was greater demand for rails, for locomotives, and for rolling stock. Between 1856 and 1885 £163m worth of railway iron and many locomotives were sent abroad. A third of the capital raised for the Indian railways till the eighties was spent in Britain and in transport charges. Between the early fifties and 1885 the total capital of the United Kingdom invested abroad rose from a probable £300m to £1,302m.

"To watch doubtful foreign governments and keep the home government sensitive to bondholding opinion," the Association of Foreign Bondholders came into existence in 1868.* The American Civil War interrupted the movement of capital to the United States, but there were many other countries where it could find a good return, notably India, where railway and public works construction went on feverishly as shareholders were guaranteed a minimum of 5 per cent secured on Indian revenues. The peak year for overseas investment was 1872, when over £83 5m were added to Britain's holdings, bringing the total to near £1,200,000. Soon after, the depression, which so swiftly spread over British industry and agriculture, stopped foreign investment. There was no surplus for export. At the end of the seventies, there may in fact have been a debit balance, but trade improved in the early eighties. Capital exports increased erratically to £82·6m in

* Clapham, ii, 239.

1896. In 1902 they were only £11·2m Thereafter they increased rapidly to £140·2m in 1907, and after a slight setback in 1908, they rose steadily again. In 1912 Britain was exporting capital at a rate exceeding £220m.

At this time Britain's overseas investments amounted to about £4,000m, a figure far exceeding that of any other country. France was reckoned to have £1,800m, and Germany £1,250m * Nearly one-half of British overseas investments were within the Empire: Canada, £514m, Australia and New Zealand over £400m, India and Ceylon £378m, and South Africa about £370m; the United States accounted for £754m, the Argentine for over £300m, Brazil £148m, Russia £110m, and Mexico nearly £100m. British investments in Europe were quite small, amounting to no more than £219m, or 6 per cent of the total overseas investments, unlike France and Germany which had over 60 per cent, and 50 per cent respectively. Before 1914 the United States was predominantly a debtor country, but her foreign investments, mainly in Latin America and in Canada, amounted to about £540m. During the war of 1914–18 there was a fall in the total of overseas investments, as capital was realized to purchase war supplies abroad. In the twenties, investment overseas was resumed. In 1938 the position was as follows:

NOMINAL AMOUNT OF BRITISH OVERSEAS INVESTMENTS IN QUOTED SECURITIES, INCOME RECEIVED AND LOAN CAPITAL REPAID

(£ millions)

	Capital	Income	Repayment
Overseas Governments and Municipalities	1,398	52·3	21·4
British Companies abroad	1,209	69·6	10 9
Foreign and Dominions Companies ..	685	43 0	6 9
	3,292	164·9	39·2

(Kindersley, "British Overseas Investments," 1938, *Econ. Journal*, December 1939, 692)

These figures do not include everything. There are large investments abroad in securities not quoted in London. There are subsidiaries and branches of companies whose main activities are at home. There are a large number of small private companies and partnerships engaged in manufacturing and trading abroad, as well as estate and property abroad owned by private individuals residing in the United Kingdom. All this may account for £400m, and together with the quoted investments bring the total up to £3,692m, providing an income of £184·9m.

Britain's large foreign investments were often cited as an infallible sign of her prosperity. By analogy with those of the individual, these were regarded as the savings of the nation. The sober truth is that they are the savings, or the possessions, of particular individuals who, of course, receive the income or bear the loss on them They do not belong to the nation as a unit, nor does

* *The Problem of International Investment*, Royal Institute of International Affairs, London, 1937, Ch IX.

the nation as a unit reap the benefits from them. In the ten years before the war of 1914–18, the rate of investment rose by leaps and bounds, reaching the gigantic figure of £226m in 1912. From 1896 to 1913 money wages rose by about 17 per cent, while retail prices rose by about 25 per cent. In short, the general standard of living fell. Meantime, little was done to reform the ravages of industrialism on social life. There were slums in plenty. Capital which might have been invested at home—to build houses, to produce clothes, furniture, and the countless other things necessary for reasonable comfort, went abroad into speculative ventures which often yielded nothing to their shareholders, or was lent to foreign states which often repudiated their indebtedness; but few, even among those who lost their savings, repudiated the system itself, which continued to increase. The savings of the country were invested abroad because there were profits for those who were lucky or shrewd. There was little or no profit to be made out of rebuilding the slums; but there were large rewards for building railways in Africa. The calculus of private profit determined the distribution of the nation's resources, and if people at home were too poor to afford adequate clothing or food or shelter, the machinery of capitalism decreed that they should remain ill-clothed, underfed, and badly housed Investment of capital overseas benefited the country only in so far as it enabled it to draw a revenue in the form of food and raw materials from abroad without exporting goods in return.

THE BALANCE OF TRADE

Britain has to import raw materials, such as cotton, wool, copper, tin, rubber and iron ore, and food such as wheat, sugar, tea, coffee and cocoa. She can pay for these only by exporting goods and services. Under these conditions foreign trade is a necessity for Britain. At many times in her history there has been controversy about how to balance the different items of such trade. At one time it was argued that the balance ought to be symmetrical, and this explains why trade with France and India was not regarded with favour in earlier centuries. Others point out that exports and imports of two countries seldom, if ever, balance. Trade is often three-cornered or multilateral. Imports from India are paid for by exports to the Continent. In considering the balance of trade, one must therefore consider the total foreign trade of a country. Even so it is generally true that import and export of goods will not balance, and this has often led to great confusion in the minds of people. Imports into Britain persistently exceed exports. This discrepancy can be explained by distinguishing between visible and invisible exports. Visible exports are goods of all kinds. Invisible exports consist of services which the receiving country must pay for, and this can be done by means of goods.

Of the invisible items of Britain's trade, the most important are capital (overseas investments) and the services of shipping, insurance and banking. The investment of capital abroad generally shows itself in increased exports of consumable or constructional goods. A country raises capital abroad because it requires purchasing power to buy equipment or constructional goods, and so the transaction results in increase of exports by the creditor country and increase of imports to the borrowing country. Since individuals

invest capital in order to obtain a return on their money, a country which has capital invested overseas receives interest which comes in the form of goods. Thus there is an import against which there is no corresponding visible export. There is, however, an invisible export—the services of the capital invested abroad. Thus each year, as Britain's overseas investments mounted, her imports increased, as investors at home drew tribute from the countries where they had invested their money. In 1913 the amount thus received was no less than £210m.

Foreign trade involves shipping, and since Britain had gained priority in shipbuilding in the age of steam and iron, she quickly captured a large share of the world's carrying trade. Before the war of 1914–18 her shipbuilding industry was greater than that of all other foreign shipyards together, and her mercantile marine was the largest and most up-to-date in the world, accounting for almost one-half of the world's steam tonnage. The next largest mercantile marine—that of Germany—was only one-fourth as large as Britain's. Since British ships were used by foreigners, large payments were annually made, and these again came in the form of goods. Imports swelled because Britain was the world's greatest carrier. In 1913 the net national shipping income amounted to £94m. The export was an invisible one—the services of shipping. Foreign trade requires financing and insurance. A large part of this business was carried on by London firms, and so a further income amounting to £25m in 1913 was received for this service. It is possible to arrive at a true appreciation of the balance of trade only when these and other smaller items are taken into account. The following table shows the chief items in Britain's balance of international indebtedness in recent years.

REAL BALANCE OF BRITISH OVERSEAS TRANSACTIONS
£ millions
(Cole, *British Trade and Industry*, 180)

	1913	1924	1927	1930
Excess of imports of merchandise and bullion	158	324	390	392
Excess of Government payments overseas		25		
	158	349	390	392
Excess of Government receipts from overseas	—	—	1	21
Net shipping income	94	140	140	105
Net income from overseas investments ..	210	220	285	235
Net receipts from short interest and commissions	25	60	63	55
Net receipts from other sources ..	10	15	15	15
Total	339	435	504	431
Total Credit Balance ..	181	86	114	39

THE FIRST WORLD WAR AND AFTER

The World War of 1914–18 brought great disturbance to the economic life of belligerent and non-belligerent alike. British foreign trade had to be curtailed because men and machines turned to the business of war. Scarcity of shipping space demanded drastic reductions in certain items of our foreign trade. Some exportation had, of course, to be carried on to buy food and raw materials, but the ordinary channels of trade were disturbed, and some were closed. Thrown more on their own resources, foreign countries which had hitherto been content to come to Britain for their manufactured products set about developing industries of their own. And as they showed their capacity to supply their own markets, they proceeded to capture markets which Britain was no longer able to supply. This was particularly true of the Far East, where Japan, now highly industrialized, extended her economic system beyond her own frontiers and served the markets of China and India.

When the war was over, conditions were very different from what they had been in 1913. The change from a war economy to a peace economy was not easy, especially when so many folk were content to try to re-establish pre-war conditions of capitalist enterprise. Excessive expansion of some industries, such as coalmining, engineering and shipbuilding, interruption of the export trade, development of the cotton industry in the East, political disorganization of India and China, a heavy fall in the value of silver, currency disorders in European countries followed by stabilization at a figure which gave a temporary stimulus to their export trade, tariff barriers that heightened as a wave of nationalism swept over Europe—all these things had a profound effect on Britain's trade. But there was something else that did so. The financial policy of the Government involved deflation and the reduction of monetary costs of production. Before equilibrium was restored, the gold standard was established in 1925. This handicapped Britain in foreign markets, because the new rate increased the gold costs of production, while other countries such as France, Belgium and Germany stabilized their currencies at a rate favourable to lower gold costs of production.

Our export industries suffered severe depression and unemployment, while the output of food and raw materials increased at a phenomenal rate throughout the world. The Macmillan Committee declared that the output of raw material increased by no less than 40 per cent and foodstuffs by 16 per cent, while the population of the world increased by 10 per cent between 1913 and 1928. Everything thus pointed to conditions favouring the growth of material welfare elsewhere; but falling wholesale prices and rising stocks of commodities impoverished the raw-material producing countries. This soon had its effect on Britain and other manufacturing countries. The world plunged headlong to the crisis of 1929–31. To save themselves from the avalanche of cheap food and raw materials, and to preserve their own economic life from the effects of advancing technology, all the countries of Europe raised their tariff barriers. Even Britain deserted her long-established policy of free trade. In 1921 the Safeguarding of Industries Act had given protection to a number of "key industries" and had

made provision for protecting industries suffering from foreign dumping. A few years later, taxes were imposed on silks and hops. Despite the emphatic verdict of the people at the 1923 election, the final break came in the crisis of 1931. On the ground that Britain was headed for irretrievable disaster by importing more than she was exporting, the newly-elected National Government proceeded in 1932 to impose a general tariff of 10 per cent, which was later raised to 20 per cent Most food and raw materials were exempt, but a measure of protection was granted to wheat by establishing a wheat quota, which, in effect, guaranteed the farmer a remunerative price above the world price. The difference was made up by a levy on flour.

During the Victorian age the proud boast of the professional apologists of the existing economy was that capitalism, as defined in the opening paragraphs of Part II (p 145), is a self-compensating system in which the interplay of human effort and human requirements conspires to achieve the maximum use of human resources and to promote the fullest exercise of human ingenuity. The decade before the second world war was the obituary on this engaging rationalization Against a background of burning wheat crops, subsidies to discourage farmers from growing more than they could hope to sell in the "free" market, shiploads of coffee cast into the sea, and introduction of insect pests to check a surfeit of rubber in the plantations, a complacent fantasy which had hypnotized a century lost its grip on any but the professional high priests and professional hirelings of high finance. Free trade versus socialism was a dead issue The real choice lay between an economy rigidly controlled to ensure a minimum monetary profit for the privileged few and an economy of common ownership rationally planned to guarantee the satisfaction of needs which all human beings share.

PART III

Human Relations

CHAPTER XI

THE SPECIALIST IN BRITISH SOCIETY

We have now seen that the nineteenth century was a period of social mutation. Starting in Britain, a process, which has since involved every continent, disintegrated a pattern of life which had predominated since the beginning of settled communities. From the Neolithic Revolution, which started somewhere in the Near East ten thousand years ago, till the end of the eighteenth century of our own era, the prevailing mode of production common to successive civilizations was *domestic*. The home was not merely a unit of self-propagation. It was a unit of production, alike for production of food and for production of manufactured commodities. To be sure, the day's work in the Homeland of two hundred years ago was not all homework. There were mines. There was navigation. There was commerce Still, mining, navigation and commerce were well-established human activities in the earliest civilization of which we have a written record; and the tempo at which the home relinquished its hold on the daily work of mankind during the last two centuries eclipses that of any large-scale social innovation during the two preceding millennia.

This rapid spread of the factory system was the offspring of technical innovations which threatened the home as a unit of social organization in several ways. It coincided with vast improvements of human communications of all kinds Human life was becoming vastly mobile. With this gain of mobility consequent on the invasion of daily life by unprecedented facilities for rapid transport, social ties which bound the individual to the home and the home to the locality were in process of dissolution Such loosening of social ties itself synchronized with circumstances which cast aside pre-existing social barriers, promoting new solidarities and new groups within the community. One phenomenon which impressed itself inescapably on the imagination of the onlooker, from Adam Smith to Karl Marx, was increasing division of labour, seemingly tending to the disappearance of specialization, though, as we now see, generating a mighty array of new specialities Another, equally characteristic of the impact of the factory system on human relations, was rapid urbanization with concomitant emergence of a new awareness of common needs and common dangers transcending traditional obstacles to human co-operation. To assess aright the net effect of forces, some tending to greater coherence of the social group, others to greater diversity of social stratification, will be our task in the next few chapters.

When Chaucer's pilgrims made their way to Canterbury and Piers Plowman contemplated the rural scene from the Malvern Hills, the class structure of England was comparatively simple. As we learned the story in our schooldays, English society consisted of lords and commons, of gentlemen and labourers. The barons held their land of the King in return for services. Below them were lesser people—freemen, villeins and cottars, whose lot in life was fixed by the inexorable accident of birth; and this stratification of society was accepted as inevitable and desirable.

"God has ordained," says Chaucer's Parson, "that some folk be more high in estate and in degree, and some folk more low, and that everyone should be served in his estate and in his degree"

There were traditionally three "estates" or social classes—Lords Spiritual, Lords Temporal and Commons, but for practical purposes we may group the first two together. Thus society was made up of two major classes, one small, select and wealthy—the lords of land whether lay or clerical—and the other large—the ordinary folk of the countryside and the towns. It was an axiom that these classes were divinely ordained, each with its privileges, each with its responsibilities. The landlord was indeed privileged in holding land and in having some say in the government of his country, but he also had responsibilities It was his ostensible duty to protect the common folk of his estate from violence, to dispense justice and to maintain order.

This schoolbook picture of medieval society requires qualification in more ways than one. There were wide differences in social and political status within each group, but especially within the landed "estate." Some lords exercised sway over vast areas of the country, and might indeed be rivals to the King himself. Others were small people with possessions not exceeding a few hundred acres In short, the personnel of the landed estate extended at one extreme from earls and barons to knights and ordinary freemen at the other. We now know that trade and commerce were far more important in medieval times than used to be commonly supposed. The nobleman who invested heavily in trade and the wealthy merchant of humble origin were conspiring to undermine the simple view of society set forth by Chaucer's parson. Still, it remains broadly a truism that there was little movement from class to class throughout the period. The villein might become a copyholder or a freeman He might move into a town and become a craftsman, but he moved within a very limited range, recognizing the social and political superiority of the landed aristocracy and accepting their view that it was their function to govern.

Such a conception of society persisted for many centuries. Indeed there are traces of it alive to this day, especially in country districts where landed families still occupy a unique position in social organization Though the function of government, of maintaining order and of dispensing justice has long since passed into the hands of county councils, police force and law courts, landed families, shorn of their powers, still retain something of the prestige of their ancient glory. Changed economic circumstances often bring the old country seat, depository of centuries of tradition and culture, under

the hammer. It becomes a hostel or a hotel or a college for adult education; but possession of land still ranks high and country folk still doff caps to the lord of the manor, now a prosperous business man who has bought a country seat, or it maybe the grandchild of one.

THE MIDDLE CLASS

In the sixteenth and seventeenth centuries England and Scotland found ways of modifying their social arrangements to admit to a share in government a new social group. It was a middle class which derived its wealth and importance from trade. In so far as the wealthy wool merchant or the cloth manufacturer entered the ranks of the aristocracy and members of the aristocracy themselves invested in trade, English social structure had an elasticity which was not characteristic of that of France or Spain. There are several reasons for this. Capitalism was more firmly entrenched in Britain in the sixteenth and seventeenth centuries than anywhere on the Continent. It had shown unrivalled vitality and was capable of vast expansion. Partly owing to its own momentum it created a place for itself in the body politic which could not be challenged. Its very strength enabled it to modify the political and juristic make-up of the country in its own interest.

In an age of fierce nationalism there was no king who was not prepared to accept the current maxims of absolute power embodied in the Roman Law and taught by the learned jurists of the Renaissance. The merchant class threw its weight on the side of the King in the struggle that ended feudalism and established a strong national state; but they had no disposition to create a tyranny hostile to the interests of capitalism. The Renaissance, however, stimulated an interest in Roman Law on the Continent and in England the Privy Council sought without success to introduce it; but Englishmen had never shown great enthusiasm for Roman Law with its emphasis on centralization and absolutism. They had blundered into a more flexible legal system by creating out of customs and precedents what came to be known as the Common Law, and they stood by it. The middle class disliked an absolutism likely to cramp commercial expansion and check economic endeavour. Already in Tudor times there was uneasiness over extension of the judicial powers of the Council with its prerogative courts like the Star Chamber and the Councils of Wales and the North. Before the death of Elizabeth there was fierce antagonism between the prerogative courts of the Crown and the courts of the Common Law. The feud went on in the seventeenth century and constituted one of the main bones of contention between King and Parliament In accordance with Roman principles, the former held that the will of the Prince was the source of law. The latter urged that law had an existence independent of the monarch, alterable only by Parliament. The issue was never seriously in doubt. In 1641 the last of the prerogative courts was abolished, and the Revolution of 1688 consummated the triumph of the new mercantile classes.

The victory of the Common Law contributed in no small measure to the flexibility of English social structure. Henceforth class differences were based on economic as opposed to *juristic* grounds. In France, where no

such change took place, a mercantile class had grown apace in power and influence since the days of Colbert; but the rigidity of the legal and political system excluded them from a share in the government of the country, and the deep cleavage between the aristocratic order and the "third estate" ended only in Revolution. Other events which took place long before this supply a further reason for the easy admission of a middle class into the body *politic* of England, which had been the seat of an economic revolution peculiar to itself in the sixteenth century. The growth of the woollen industry offered special opportunities of gain to merchant and landowner alike. When the latter found their incomes threatened by rising prices following the influx of bullion from the New World (p. 33), they came to terms with the commercial spirit and reaped good returns from the conversion of broad acres into pasture lands. When the dissolution of the monasteries created a wave of speculation in landed property, wealthy merchants were not slow to seize an opportunity of good investment, at the same time enhancing their prestige by becoming landed proprietors. A process started in the days of the enclosure movement of the sixteenth century gained momentum when the Civil War drove many landowners into bankruptcy. The fusion of two classes was consummated by inter-marriages, which swept aside the last barriers of social caste.

There was now no fundamental division of interest between the older landed aristocracy and the new middle class of merchants Even in Elizabeth's reign the wealthy merchant was finding his way into the councils of State Aristocrat and merchant alike had interests in industry and commerce. Queen Elizabeth herself took shares in trading ventures to Africa, as well as in Frobisher's voyages, and it is reputed that she was financially interested in Drake's voyages (See W. R. Scott, *Joint Stock Companies*, i, 75, 80 ff) In the list of shareholders in the important Mines Royal Company, 1580, we find the names of Lord Burghley, the Earls of Pembroke and Leicester, the Lord Mountjoy, as well as others more directly concerned with trade *

This comparatively easy access of the more prosperous and influential members of the merchant class into the ranks of the aristocracy prevented any violent conflict between the bourgeoisie and the landed classes in England Doubtless this infiltration of a new and vigorous element into the more conservative class tended to broaden its basis and widen its beliefs. On the whole, however, the newcomers assimilated the outlook of the larger class with little modification. So faith in the social and intellectual superiority of the upper class remained unshaken, their prestige and political importance strengthened. The wealthy merchant did not storm the citadel of privilege. He sought entry by purchase of an estate, by marriage, or by winning a peerage, so taking his seat in the House of Lords side by side with those whose society he coveted eagerly. We get a view of the social structure of England and Wales before the coming of power-production in Gregory King's analysis made in 1688. At that time, it will be observed, the mass of the people were engaged in agriculture, and though there were differences of economic condition and of social status between the large freeholder and

* Appendix IV, *English Brass and Copper Industries*, H. Hamilton, 1926.

the cottager, the broad distinction was between landowner and squire, on the one hand, and peasantry on the other.

No. of Families	Ranks, Degrees, Titles and Qualifications	Heads per Family	No of Persons	Yearly Income per Family
				£
160	Temporal lords	40	6,400	3,200
26	Spiritual lords	20	520	1,300
800	Baronets	16	12,800	880
600	Knights	13	7,800	650
3,000	Esquires	10	30,000	450
12,000	Gentlemen	8	96,000	280
5,000	Persons in greater offices and places	8	40,000	240
5,000	Persons in lesser offices and places	6	30,000	120
2,000	Eminent merchants and traders by sea	8	16,000	400
8,000	Lesser merchants and traders by sea	6	48,000	198
10,000	Persons in the law	7	70,000	154
2,000	Eminent clergymen	6	12,000	72
8,000	Lesser clergymen	5	40,000	50
40,000	Freeholders of the better sort	7	280,000	91
120,000	Freeholders of the lesser sort	5½	660,000	55
150,000	Farmers	5	750,000	42.10s.
15,000	Persons in liberal arts and sciences	5	75,000	60
50,000	Shopkeepers and tradesmen	4½	225,000	45
60,000	Artisans and handicrafts	4	240,000	38
5,000	Naval officers	4	20,000	80
4,000	Military officers	4	16,000	60
50,000	Common seamen	3	150,000	20
364,000	Labouring people and out-servants	3½	1,275,000	15
400,000	Cottagers and paupers	3	1,300,000	6.10s.
35,000	Common soldiers	2	70,000	14
	Vagrants, as gipsies, thieves, beggars, etc		30,000	
	Total		5,500,520	

THE PROFESSIONS

In early times the professions of law, divinity and medicine were closely identified with the Roman Catholic Church. Though not originally founded by the Church, the universities quickly came under its domination, until every student was in fact a clerk and preferment in any profession, whether civil service, teaching or medicine, depended on position in the Church. "To the great mass of the younger students the University was simply the door to professional life," says Rashdall. Civil servants, physicians and ecclesiastical lawyers sought a position in the Church which would enable them to practise their profession. From the point of view of the King it was cheaper to appoint a civil servant or a physician to a benefice than to pay him an adequate salary out of his own pocket. The alliance between teaching and the Church was very close, and remained so until quite recent times. For

instance, in the nineteenth century Fellows of Oxford Colleges had to be in Holy Orders. The general view in Scotland was that a University Principal should be a divine

The great social and economic movements of the fifteenth and sixteenth centuries had a profound influence on the old professions and gave rise to new ones The chief characteristic of this age, as we have seen, was the rise to economic and political importance of the class engaged in commerce and industry, the bourgeoisie or middle class. This class had not only a new outlook on social affairs but new needs. The rigid medieval framework of society had to give way to something freer and more in keeping with the spirit of the age. This involved the breakdown of medieval monopolies and restrictions. It also meant an end to the control of economic life by the Church Catholic. Thus the Reformation had its roots deep in the social and economic life of the times. The Church had to withdraw from a large terrain of its traditional sphere of influence. As it withdrew, professions, hitherto dependent on its sanction, emerged independent and free. The chief offices of State were gradually wrested from the Church. By Elizabethan days they had come to be filled by laymen whose minds and interests were more attuned to the strenuous commercial life of the towns

The professions of medicine and law were also transformed by the social, intellectual and economic movements of the time Out of touch as it was with everyday problems of life, the former had made little progress in medieval days. An impulse to advancement came from the wider interests and the keener intellectual atmosphere of an age which witnessed the discovery of America and an efflorescence of capitalist enterprise The chain which bound medicine to the Church was gradually broken. An important milestone was 1518, when the Royal College of Physicians was founded, but it was some time after this before medicine was finally freed from ecclesiastical control. Law, too, was being influenced by the forces which were creating the modern world. Long before the Reformation, however, the common lawyers were completely divorced from the Church The Inns of Court were functioning as independent secular bodies in the early fifteenth century. As the dominion of the Church contracted and its sphere of influence declined, the canon lawyers naturally found their work dwindling Civil Law, studied at Universities mainly by clerks with a civil service career in view, also suffered an eclipse as the work of the Reformation proceeded. By the sixteenth century, say Carr-Saunders and Wilson,* "the already secularized common lawyers came to represent almost the whole body of lawyers."

This new social and intellectual order also created new demands for professional services. Break-down of the medieval land system and substitution of capitalist farming in some parts of the country, involved transference of land, and therefore demand for the services of notaries and *scriveners* skilled in the drafting of deeds. Moreover, expansion of trade and creation of wealth called for drafting of deeds of co-partnership or preparation of wills, conveyances and the like From being a mere amanuensis, the scrivener became legal adviser in a period of economic flux. Being in touch with people who wished to transfer property, make wills or form business partnerships,

* *The Professions*, 1933, p. 293.

*

he was in a strong position to act as financial middleman, bringing together lender and borrower. By use of their own capital, the more prosperous ones became money lenders. Doubtless, some received deposits from customers and in turn loaned them at interest to those in need of ready cash. The scriveners were therefore pioneers in the profession of banking. (*See* p. 221.)

RELIGIOUS TESTS AND SOCIAL RECRUITMENT

For upwards of two hundred years social recruitment in England was profoundly affected by the enforcement of religious tests on those seeking public office or university education. By a series of laws passed in the Restoration period, those willing to subscribe to the Anglican faith had special favours. Heavy disabilities were heaped on Quakers and Nonconformists as well as on Jews and Roman Catholics. For instance, the Five Mile Act forbade any Nonconformist minister from coming within five miles of any corporate town, and since most dissenters lived in the towns, the loss inflicted was immense. This wave of intolerance and persecution marked a violent reaction from the freedom enjoyed by all religious sects during the Commonwealth. The Puritan Revolution had been a challenge to the old order. For a time it signalized triumph for the commercial classes and for those of the Puritan faith, including Quakers and other nonconformists. Even the Jews, who had either avoided England altogether or had slipped in unobtrusively for two centuries after their expulsion by Edward I, now benefited from the growth of toleration. After 1655 there was no legal bar to their return to England. They were too valuable for their trade connections, as for instance with Spain and Portugal, and because of their business acumen. "I meddle not with any man's conscience," was the proud boast of Cromwell. Cromwell was in advance of the majority of his fellow countrymen. While he was prepared to grant the widest toleration, there were many who were not averse to persecution. Then as now it was easy to arouse hostility to the Jews.

Had the spirit of toleration been maintained the avenue of advancement to professional and public life would have been broad and English life would have been enriched beyond measure; but the Restoration of the monarchy in 1660 initiated a violent reaction. The pendulum swung in the opposite direction. Parliament and the squires, determined to repay old scores, insisted on a fierce religious persecution. Intolerance replaced tolerance. Numerous disabilities were placed on dissenters. Persecution of Quaker and other nonconformists was the fashion. The main importance of these Acts, called the Clarendon Code, as Professor G. N. Clark points out, lies not in the persecution but in the great social change they effected. "They assumed," he says, "that in religion England was now to be divided. The Church of England was to be purged of fanatics and heretics by oaths and subscriptions." English society was now divided into "church" and "chapel," a division which ran through politics, the press and economic life as well, and lasted for upwards of two hundred years.

In short, dissenters were excluded from public life as well as from the universities. Denied all opportunities of entering politics or the professions,

they naturally gravitated to industry and commerce where they found abundant scope for their highest abilities Hard work and thrift, perseverance and sobriety, qualities inculcated by their religious beliefs were just the qualities most favourable to business success. Capitalist enterprise and religious nonconformity were thus closely associated; and the iron industry of the eighteenth century affords abundant proof of this close alliance. "The very names of the ironmasters," writes Ashton, "are redolent of the Old Testament and imply for those who bore them a Puritan parentage" At the end of the seventeenth century there were signs of a more lenient attitude A Toleration Act, which with certain limitations granted the right of worship to Protestant nonconformists, was passed in 1689 The Corporation and Test Acts, though not repealed, were less rigorously enforced. Nevertheless opposition to complete toleration was strong, and religious tests were fully maintained till well into the nineteenth century. People unwilling to take the Communion according to the rites of the Church of England were still debarred from taking public office under either the Crown or the municipalities, and they were rigorously excluded from the universities.

"At Oxford," says Woodward, "no one could matriculate without subscribing to the thirty-nine articles, at Cambridge nonconformists might become members of the university, but they had not access to scholarships, fellowships or university degrees The universities were the training-places of the anglican clergy; each college had its chapel, at which attendance was compulsory, and the endowments of religion could not easily be separated from those of learning." (*The Age of Reform*, p. 471)

The Church fought hard to maintain the exclusion of nonconformists and it was not until 1871 that religious tests were completely and finally abolished.

The effect of this long period of university exclusiveness on English social life could not but have the most profound consequences. The exclusiveness of the two medieval English universities (Oxford and Cambridge) helped to establish the intellectual dominance of the Scots in British life North of the Border the Clarendon Code and the Test Act had no currency. It is true that a Test Act had been passed by the Scots Parliament in 1681, but it was designed to consolidate presbyterianism which was the national religion of Scotland. All persons in public office were required to subscribe to "the true Protestant religion" as contained in the Confession of Faith, recorded in the first parliament of James VI in 1568; disabilities were imposed on Roman Catholics and on Episcopalians, but no large vigorous section of the community, like the English nonconformists, was excluded from social and educational opportunities. Throughout the eighteenth and nineteenth centuries when Oxford and Cambridge were closed to nonconformists, Scottish universities were able to pursue their cultural work unhampered to any appreciable extent by restrictions imposed by religious tests. The result was profound. More in contact with the social forces of the time, the Scottish universities soon became famous for their work in medicine and science. Edinburgh and Glasgow especially sent their doctors south to England to play a distinguished part in great medical advances then taking place, with far-reaching consequences for the health of the population

The efflorescence of Scottish education two centuries before England, was encouraged by two circumstances. One was her close commercial and cultural ties with Holland, the foremost centre of capitalist civilization in the seventeenth century. The other was the opportunity of expansion offered by the Union of 1707 which made her a partner in England's overseas empire. Scotland had been a poor country, weak in natural resources and afflicted by an unpropitious climate. The standard of living of her people was extremely low and her methods of farming and manufacturing were primitive. All this had been accepted as inevitable. Poor harvests, famine and disease were dispensations of Providence. No one imagined it could be due to inefficiency or ignorance. Since economic pursuits did not arouse controversy or call for discussion, religious questions loomed large. The presbyterian form of church government with its democratic tendencies encouraged discussion and religion offered a perennial theme. Theological disputation was common in every parish and in every hamlet. For thirty years before the Union, however, there were signs that a new era was opening. Scotsmen were busily engaged in developing new industries, such as coal mining and textile manufacture, to mention but a few. They were engaging in trade with America and they were beginning to play a part in the scientific movement of the times. By offering great opportunities for enterprise both at home and overseas, the Union of 1707 stimulated these innovations.

For a time there was hardship to bear. Union with England called for considerable readjustment of Scottish economic, social and political life, but the initial phase of difficulty had been overcome long before the rising of '45, and Scotsmen were showing much evidence of their capacity to trade with the colonies, to improve their farming and industrial methods, and to develop their universities Religious disputations came to occupy a smaller and smaller place. The horrors of persecution and witchcraft, kept alive so long by a church which claimed unswerving obedience and loyalty from its members, silently came to an end. Stimulated by the opportunities now before her, Scotland became a recruiting ground for doctors and teachers, for colonists and administrators in many fields of activity. This revolution in behaviour is remarkable. In the seventeenth century witch-burning and the most dreadful tortures were common, imposed not by an ignorant mob but by educated judges and ministers. By 1750 Scotsmen were already establishing themselves in places of influence and importance at home and in the colonies Before 1700 they had an unenviable record of intolerance and bigotry Within a century they had established a high reputation for culture and humane administration Neither the one nor the other was primarily a product of national temperament. Each was a result of the system, social and religious, which prevailed at the time; and what is true of Scotland may well be true of those peculiarities of any other social group for which the exponents of Racialism—be it called *Rassenhygiene* or Eugenics —offer quasibiological explanations.

RECRUITMENT OF EMPLOYERS IN THE INDUSTRIAL REVOLUTION

In the first phase of the industrial revolution a high proportion of employers rose from the ranks. "Most of the successful men in the (iron) industry," says Ashton,* "entered it from the secondary metal traders—successful craftsmen seeking control over the sources of their raw material—or from the merchanting of iron and steel wares. There were, of course, many exceptions. Andrew Yarranton was originally a linen-draper's assistant; John Pemberton came of a family of goldsmiths; Charles Lloyd was a farmer; John Roebuck a doctor of medicine; Joseph Dawson a minister of religion, and Samuel Walker a schoolmaster. But that the generalization laid down is true of the body of ironmasters is incontrovertible. Henry Darby, the father of the first Abraham, was a locksmith, and Abraham himself was, for a time, a maker of malt-mills. Aaron Walker was a nailer; William Hawks, of Newcastle, and John Parker of Staffordshire began their industrial life as blacksmiths, Peter Stubs, the founder of the well-known firm at Rotherham, was originally a filemaker and innkeeper at Warrington; Spencer, who held Barnby Furnace in Yorkshire, began as a maker of hay-rakes, and George Newton of Thorncliffe was a maker of spades and shovels, who was drawn to iron production by the high price of the material with which he had to work."

To raise oneself from the rank of craftsman or small merchant to that of ironmaster was no easy matter, calling for grit, determination and ruthlessness, with no inconsiderable measure of good luck Not everyone possesses such qualities, or is fortunate enough to acquire control over the necessary capital. Samuel Garbett, the chief founder of the famous Carron Iron Works in Scotland in 1759, started life as a brass worker in Birmingham By force of character he rose to be an influential industrialist with interests in brass manufacture, copper mining and smelting, and iron production Garbett's works were the parent of several others set up by men who had risen to managerial posts at Carron. Generally they had as partners merchants interested in the sale of iron products, or landowners interested in the exploitation of the mineral resources of their estates. Sometimes industrial enterprise drew its personnel and its capital from commerce. Many of the tobacco lords of Glasgow started in a small way by shipping tobacco from America. By the purchase of plantations, they then became influential merchants and large capitalists. On their return to Glasgow some acquired estates and so added social prestige to their wealth. Others, like the Dunlops who purchased the important Clyde Iron Works near Glasgow, invested their money in industry.†

One might name innumerable firms founded by craftsmen or merchants, sometimes in association with local people who advanced capital but took no active part in the business. Scott's shipbuilding yard at Greenock, which flourishes today after two hundred years of active service, sprang from the small boat-building yard of John Scott, founder of the firm in the early

* *Iron and Steel in the Industrial Revolution*, p 209

† *Curiosities of Glasgow Citizenship*, by George Stewart, Glasgow, 1881.

days of the eighteenth century.* Many founders of cotton spinning mills commenced as hand-loom weavers or as drapers. When the craft of engineering was not as yet born, these pioneers of factory production had to secure millwrights and others to make their machines before starting to manufacture. Robert Owen, famous as the owner of the New Lanark Mills in Scotland, tells of his debut as an industrialist in his own words:

> "Jones and I had agreed," he says, "with a builder that he should erect and let to us a large machine workshop, with rooms also for some cotton spinners. . . . We had shortly about forty men at work to make machines, and we obtained wood, iron, and brass, for their construction upon credit. . . We made what are technically called 'mules' for spinning cotton, sold them, and appeared to be carrying on a good business "†

David Dale, predecessor of Owen at New Lanark and owner of several cotton mills in Scotland, started life as a hand-loom weaver. Later he became an importer of yarn and employer of numerous hand-loom weavers, and finally a captain of industry.

During the first phase of industrialism in Britain there were opportunities in plenty for men of talent and enterprise to rise from humble beginnings to positions of great influence. To an even greater extent, this has also been the experience of the United States, because America has been unhampered by class traditions of wealth and prestige which complicate social relations in the Homeland. It has also been the experience of Russia in our own day. According to Mantoux, the phase when craftsmen could easily rise to be employers had come to an end in Britain by about 1830. Partly due to increased employment of capital and partly to undoubted advantages possessed by those who had already established themselves, the more important manufacturers tended to be recruited from the middle class. Employers and wage-earners were separated by a barrier, impassable except to the fortunate and highly gifted.

As every year passed the capital requirements of industry rose far beyond the capacity of the individual or the small group of partners. So the joint stock or company system became general. By now the possibility of the average workman rising to the rank of employer was altogether trivial. The fact that some men reached the highest rung of the ladder simply shows that barriers can be overcome by exceptionally able men if helped out by exceptional luck and exceptional opportunity. It certainly does not prove that the way is open to anyone with capacity and ability. The industrial ladder is slender, and the number of wage-earners is very large in proportion to the numbers reaching the employer grade. There are exceptional industries, notably, among the large ones, cotton.‡ It has been estimated that 76 per cent of weaving employers in 1912, 73 per cent of spinning mill directors, and 84 per cent of spinning mill managers in the same year were originally wage-earners; but this does not mean that the mass of wage-earners can

* *Two Centuries of Shipbuilding by the Scotts of Greenock*, 1906.

† *The Life of Robert Owen*, by Himself, 1920, 31–2.

‡ Chapman and Marquis, "Recruiting of the Employing Classes from the Ranks of Wage-earners in the Cotton Industry," *Journal of the Royal Statistical Society*, February 1912.

hope to be employers one day. In striking contrast with manufacturing industry is mining, which in the early days of industrialism drew capital and enterprise from the class whose fortunes were most intimately bound up with the land. Eager to benefit from the expansion of the demand for coal, landowners themselves engaged actively in mining enterprise, among others Lord Dudley in Staffordshire, the Duke of Devonshire in Derbyshire, the Earl of Gower in Shropshire, the Duke of Argyll, the Duke of Hamilton and the Earl of Mar, the Duke of Buccleugh, and Lord Dundonald in Scotland.

Instead of working their minerals directly or through salaried agents, some owners leased them. The lessees were sometimes drawn from landed families. More generally they were ironmasters interested in the supply of raw material to their furnaces, or farmers interested in obtaining coal for lime-burning. John Barnes of Barlow in Derbyshire, for instance, a freeholder of about seventy acres, obtained a lease of a small colliery in 1763, and so established an association with the coal industry which his descendants have carried on to the present day. In Scotland, Alexander Baird, farmer, in the parish of New Monkland, leased coal mines in the early nineteenth century, and thereby laid the foundations of the mammoth iron business established by his sons at Gartsherrie The Church, being a large land-owner, also had an interest in mining royalties. In Durham, more especially, clergymen often worked their glebes for coal or joined with others to prosecute mining in their parish.

"In Restoration times," say Ashton and Sykes (*The Coal Industry of the Eighteenth Century*, 4), "a curate of Beeston, near Leeds, 'a man of rough manners, great resolution and much personal strength' forsook the cure of souls to become the manager of a coal-mine: and a hundred years later Joseph Dawson, an Independent minister, who was in the habit of paying wages to his colliers on Sunday morning before he entered the pulpit, became the chief partner in one of the largest coal and iron concerns in the West Riding"

In the course of a century most landowners gave up working their minerals direct, and control passed into the hands of joint stock companies. Sometimes they continued to take an active interest in the industry as directors or chairmen More often they were content to remain passive, collecting their royalties, defending at all times their right to do so, and throwing their weight on the side of the coal masters in the House of Lords. The miners themselves, once the aristocracy of labour, were now the most under-privileged class of worker in the country In eighteenth-century Scotland they were serfs tied to the pit where they were born and doomed to spend a life of unremitting toil in the service of the owner who claimed jurisdiction over them. Ostracized by other workers who regarded them as an inferior and brutalized race of men, the miners lived in villages isolated from the rest of society. The industry was recruited from their own sons and daughters. "The coal-miners of the eighteenth century formed, indeed, an hereditary caste almost as exclusive as that of the owners of mineral rights"* The gulf that separated them from other classes of workers was unbridgeable

* Ashton and Sykes, p. 155.

They suffered cruelly under the lash of economic and social conditions which they were powerless to control; but no class of worker was so conscious of its common interests or so willing to sacrifice everything when its members were in danger.

THE VICTORIAN MAN OF PROPERTY

Recruitment of the managerial and employing classes from the ranks is one of the noteworthy features of the early phase of industrialism. It explains the swiftness with which many firms rose from insignificance to importance, managed and directed by men whose lives were dedicated to the business, inspired by fanatical faith in their own powers and in the beneficence of gruelling toil and grinding thrift. Early struggles coloured their social outlook and cast their minds in a narrow mould. Having outstripped their fellows, they were hard employers, claiming autocratic powers over the industries they had helped to create. Their own experience and their cramped interests fitted them ill for the role of master of the fate of their workpeople. Doubtless some of them led extravagant lives and built mansions in which to play at being aristocrats; but most were content to devote themselves body and soul to business What profits they made, some in a short time, might well have been sufficient to endow them in idleness for the rest of their days, but a life of indolence and luxury was anathema to the Victorian industrialist. Profits must needs go back into industry to finance expansion, to widen its basis and to increase its influence and power in world markets.

In spite of the rise of a new manufacturing class to a position of economic and social importance, the distribution of social power continued to have no intelligible relation to basic human needs The prestige of land holding remained wellnigh as great as ever, and brought to those concerned an influence in national and local affairs out of all proportion to their social function in this age of machine-production and industrialism. A centuries-old view of the place of a land-owning aristocracy in society persisted, readily accepted by recruits now so swiftly enrolled in its ranks, and the plausibility of the traditional view gained strength from the active role played by landowners in the reform of farming technique. The agrarian revolution gave them the means of increasing their fortunes and beautifying their estates, but their reaction to the tocsin of Liberty, Equality and Fraternity was to entrench themselves more firmly in their privileged position. The French Revolution was a challenge to the old order. The landowning class met it by consolidating their position in society and driving underground the reform movement, which, in part, drew its inspiration from across the Channel. (*See* pp. 292–4.)

The abolition of privilege and the levelling of classes was hateful to the English aristocrat who viewed with dismay a movement which undermined the conception of well-recognized classes. Though differences between classes were economic and not juristic as in France and Germany, British political thought accepted a hierarchical social order without question, in which the propertied class were the depository of authority and power in the State, the "lower orders" being properly content to accept their more

lowly lot without demur. As yet, education was not for the working class. It might make them question the "lowly path which had been allotted to them by the hand of God." In the House of Commons, Giddy, then President of the Royal Society, stated the case for current social beliefs when he opposed education for the working classes in the following terms:

"However specious in theory the project might be," he said, "of giving education to the labouring classes of the poor, it would, in effect, be found to be prejudicial to their morals and happiness: it would teach them to despise their lot in life, instead of making them good servants in agriculture, and other laborious employments to which their rank in society had destined them; instead of teaching them subordination, it would render them factious and refractory, as was evident in the manufacturing counties, it would enable them to read seditious pamphlets, vicious books, and publications against Christianity; it would render them insolent to their superiors, and in a few years, the result would be that the legislature would find it necessary to direct the strong arm of power towards them, and to furnish the executive magistrate with much more vigorous laws than were now in force" (Hansard, ix, 798)

A view of society, which had its roots in earlier centuries, thus lingered on in the Victorian era, blended with the creed of economic individualism and the gospel of hard work. In the process, it was admittedly mellowed by the democratic tendencies of the age. On the one hand, the manufacturing class, now sufficiently important to overshadow the older landed aristocracy, proclaimed the virtues of self-help, industry and thrift, together with the benefits of private competition. Advancement, as they argued, was open to all who had ability and capacity for work and saving. The lower orders had only themselves to thank for their humble lot. Such a dogma, combining the lethargy of the slave-owning classes in an earlier civilization with the brisk individualism of the early machine age, would have been intolerable had the new manufacturing class, waxing wealthy as the factories and the furnaces of Britain poured forth an ever-increasing flow of products, lived idle and extravagant lives The economic system of Victorian days, says J. M. Keynes,

"depended for its growth on a double bluff or deception. On the one hand the labouring classes accepted from ignorance or powerlessness, or were compelled, persuaded, or cajoled by custom, convention, authority, and the well-established order of Society into accepting, a situation in which they could call their own very little of the cake, that they and Nature and the capitalists were co-operating to produce. And on the other hand the capitalist classes were allowed to call the best part of the cake theirs and were theoretically free to consume it, on the tacit underlying condition that they consumed very little of it in practice. The duty of 'saving' became nine-tenths of virtue and the growth of the cake the object of true religion. There grew round the non-consumption of the cake all those instincts of puritanism which in other ages has withdrawn itself from the world and has neglected the arts of production as well as those of enjoyment. And so the cake increased, but to what end was not clearly contemplated.' " (*The Economic Consequences of the Peace*, 1920, 17.)

Because so many of the leaders had risen from the ranks, the faith of the Victorian man of property, the faith that ability would always find its own

level and that those who remained on the lower rungs of the ladder would receive the awards that were their due, had indeed some basis in fact. The wealth they had acquired was, in their view, society's reward for their perseverance and their services. In their view, also, this state of affairs bore favourable comparison with that of an earlier age when social position was due solely to birth, and wealth largely to inheritance. In reality, a system which offered such dazzling prizes to anyone who could seize them was rapidly deepening inequalities of circumstance and wealth, meanwhile restricting the opportunities of many to rise. Landed families, enriched both by rising land values as urbanization proceeded and by successful incursions into finance or industry, thus came through the industrial revolution fortified and strengthened. They were joined by families which had gained their wealth from industry in the course of a few generations. By marriage, by good luck and by successful enterprise, fortunes multiplied and inequalities intensified. As generation succeeded generation, inheritance perpetuated and intensified these inequalities. In a recent investigation into "The Influence of Inheritance on the Distribution of Wealth,* Wedgwood comes to the following "provisional and indefinite" conclusions:

"In this country at any rate," he says, "the larger fortunes are left, in the great majority of cases, by those who received the larger inheritances; that rich persons, who have not received any considerable portion of their property by way of inheritance, gift or marriage, are a minority of their class, and that unequal amounts acquired by industry and saving are closely related to unequal inheritances"

INDUSTRIALISM AND THE PROFESSIONS

Until the nineteenth century, according to popular belief, there were but three professions—"divinity, law and physic." Being closely bound up with the Church, teaching was included in the profession of divinity. Yet the numerous professions which have appeared since the Industrial Revolution had their roots in the social and intellectual developments of the previous two centuries. The story of their history is closely related to the progress of science and technology in the seventeenth and eighteenth centuries.

In an age of spinning-wheels and hand-looms and traditional methods of cultivation, society made few demands on men with special intellectual accomplishments. Lawyers and ministers, doctors and teachers, were all society seemed to require, and even they were influenced by the rule of thumb methods which were accepted as the basis of practice in every occupation. An awakening interest in inquiry and experiment that marks the Elizabethan and Stuart age, growth of population, and increasing demands of society for goods and services, turned men's minds to new methods of farming and new ways of manufacture. Slowly and painfully they built up knowledge of botany and plant life as they tilled their fields, or of metallurgy, as they experimented in their furnaces with coal instead of with wood. Attracted by the practical problems that faced mankind, those with greater intellectual attainments and more certain scientific knowledge devoted

* *Economic Journal*, xxxviii, 55, March 1928,

themselves to the study of everyday problems thrown up by the economic system.

The founding of the Royal Society in 1662 well illustrates the happy alliance of science and practical affairs; and the new spirit of inquiry infected every department of the economic system. Agricultural chemistry is not, as we are apt to think, an essentially new professional pursuit. As long ago as 1723 the Scottish Society of Improvers urged that agriculture should be studied "in a university way" and that chairs of agriculture should be founded in our universities. Within the next half-century or little more, Dr. Roebuck, a medical graduate of Edinburgh with many industrial interests, was busy studying the chemistry of metallurgy in Birmingham, Alexander Keir, also a medical graduate of Edinburgh, had founded a factory for making synthetic alkali at Tipton in Staffordshire, and Henry Home, Professor of Materia Medica at Edinburgh University, was investigating the scientific problem of bleaching.

Power production with its factories, its large capitals and its industrial towns, was thus the outcome of scientific effort extending over the previous two centuries, and its triumph in the Victorian age was conditioned by the forward march of science, which drew its inspiration from the practical tasks of the times. The new industries required metallurgists, chemists and engineers. Large-scale business required organizers and professional managers. Intricate financial operations required accountants, company secretaries, insurance experts, actuaries and bankers. New means of transport required civil engineers to build bridges and harbours, to plan canals and railways; and the new towns cried out for physicians and surgeons, chemists and dentists, sanitary engineers and architects. All this called for a highly developed educational system and an efficient national and local civil service. The rise of the new professions* and the expansion of the old is the direct outcome of fundamental changes in the economic and social structure of society associated with the adoption of power technology and mass production.

THE ENGINEERS

Before 1880 civil engineers—builders of roads, bridges, canals, harbours and lighthouses—had already established themselves as a profession in which there was no easy path to competence, for there were no training facilities such as existed at a later date. It was a profession which grew up in day-to-day contact with practical problems. The great men, such as Smeaton and Rennie, Telford and James Watt, were self-taught, exploring their way through a maze of unsolved problems, gradually acquiring knowledge which they passed on to their assistants and apprentices in their workshops and offices. Starting in millwrights' shops, the cradle of the profession, many of them "were borne up by the force of their practical skill and constructive genius into the highest rank of skilled and scientific engineering," says Smiles (*Lives of the Engineers*, 1861, i, 312). Brindley, the famous canal builder, who could scarcely read or write, began in this way. So, too, did Fairbairn, engineer and shipbuilder. The great Telford was apprenticed to

* This is the subject of A. M. Carr-Saunders' and P. A. Wilson's important book, *The Professions*, to which the present writer is much indebted.

the mason's craft and thence, by way of architecture in Edinburgh and London, he turned to road, canal and harbour building (Fig. 50).

Men engaged in the great engineering works of the time were not slow to appreciate their common interests. In 1771 a proposal was made to Smeaton, the harbour engineer and builder of the third Eddystone Lighthouse (1756–9), "that it would be well, if some sort of occasional meeting, in a friendly way, was to be held . . . that thus the sharp edges of their minds might be rubbed off, as it were, by a close communication of ideas, no ways naturally hostile; might promote the true end of public business upon which they should happen to meet in the course of their employment." The outcome was the founding of the Society of Civil Engineers. Unlike their military predecessors, whose work lay in building forts and trenches, the new engineers were concerned with the constructive work of peaceful industry and commerce, hence their designation as *civil*. The society has survived to the present day under the title of the Smeatonian Society of Civil Engineers. Including within its membership only those who had reached the top of their profession, the Society was too exclusive to satisfy the needs of the whole profession of engineering. Every day its field of activity extended, as power production tightened its grip on industry and transport. Accordingly, the Institution of Civil Engineers was founded in 1818.

Hardly had the new Institution been founded when it was realized that one body could not adequately represent all aspects of the profession. Already the steam engine was conquering manufacturing industry, and its application to transport enormously widened the field of engineering. In 1847 the Institution of Mechanical Engineers was founded with George Stephenson as its first President. In time other specialist organizations were founded. The employment of marine engines raised new problems for shipbuilders—problems of design, of construction, of strength of materials and so on. As wood as a constructional material was displaced by iron and then by steel, the business of shipbuilding became a highly specialized branch of knowledge. Its claim to independence was made when the Institution of Naval Architects was founded in 1860. The next great branch of engineering to become specialized was electrical engineering, whose institution was founded in 1871, when the profession which it represented was in its infancy. While interested in improving the social status of their members, the real significance of these institutions is that they stand for *professionalism* in industry. That is to say, all of them attempt to enforce *recognized qualifications* based on formal education and practical experience as a basis of employment. Interested in the advance of knowledge in their special spheres, they demand that society should utilize to the full scientific knowledge which they possess. They have thus stimulated universities to provide facilities for teaching and research in the subjects with which they are concerned.

THE CHEMISTS

The rise of chemical industry is one of the notable features of the second half of the eighteenth century. Before this time chemicals used in industry were either natural deposits or waste materials. Their production employed

"no technique which could not be included under the general term cookery." For instance, the alkali used for cleaning wool fibre was incinerated charcoal. Lime for cement was obtained by heating chalk. Numerous remains of lime kilns show how widespread was this process Saltpetre was prepared from the white crust on insanitary deposits.

"What distinguished chemical manufacture in the modern sense," says Hogben (*The Theoretical Leadership of Scottish Science in the English Industrial Revolution*), "is the deliberate search for substitutes based on discoveries made on a laboratory scale."

The impetus to chemical advance came from the demands of industry and agriculture. The scarcity of timber made urgent the discovery of alternative sources of alkali The problem of food production directed inquiry to the chemistry of the soil. The enormous time required in the bleaching of linen turned men's attention to the chemical processes involved The leaders in this scientific movement, as Hogben shows, were graduates of Scottish Universities. Black, Home, Roebuck, Keir and Hutton were all medical graduates of Edinburgh who happily combined theoretical investigation with a lively interest in practical problems. Black's association with James Watt is well known, Home was interested in the problems of agriculture and bleaching, Roebuck established a sulphuric acid works at Prestonpans, while Keir was at one time in partnership with Boulton the Birmingham manufacturer Before the close of the century, the importance of the chemist to industry was already established. He had shown how to manufacture sulphuric acid on a commercial scale, he had discovered bleaching powder which reduced bleaching from several months to a few days, he had shown how to manufacture coal gas, and he had improved countless other industrial processes by his discoveries

Those who contributed most to these momentous advances in knowledge were well known to each other. Some of them were fellows of the Royal Society or of the Royal Society of Edinburgh, some were university professors, others were business men intensely interested in the chemistry of their processes of manufacture Wedgwood of pottery fame was a fellow of the Royal Society, and along with Keir, Boulton, Watt, Priestley and Darwin, was a member of the Lunar Society of Birmingham, whose chief interests lay in the problems of chemical manufacture. Boulton, Watt and Roebuck were also fellows of the Edinburgh Royal Society, along with Professors Black and Home.

The profession of chemistry, however, did not develop so rapidly as the profession of engineering, perhaps because chemistry is more directly dependent on laboratory experiment than engineering which makes its most valuable tests under normal working conditions in engineering shops and on ships at sea Laboratories call for large sums of money, usually beyond the pocket of individual investigators In an age when progress was estimated by output of goods, it was difficult to break down the prejudice against "pure" chemistry. At the opening of the nineteenth century there were few facilities for research It is true that the Royal Society, as well as numerous other societies, encouraged research; but investigators had

to depend for the most part on private benefactions. Wedgwood liberally financed Priestley. Both Roebuck and Boulton lavished money on perfecting Watt's steam engine. In Scotland, however, there was a lively interest in scientific investigation. Chairs of chemistry were founded at Edinburgh in 1713 and at Aberdeen in 1793, while the Royal Philosophical Institution, founded in 1799, provided almost the only centre for experimental work in England. London had its first chair of chemistry at University College in 1828, its second at King's College in 1831 Before the middle of the century the Royal College of Chemistry had been founded, as well as a chair of chemistry at Owens College in Manchester.

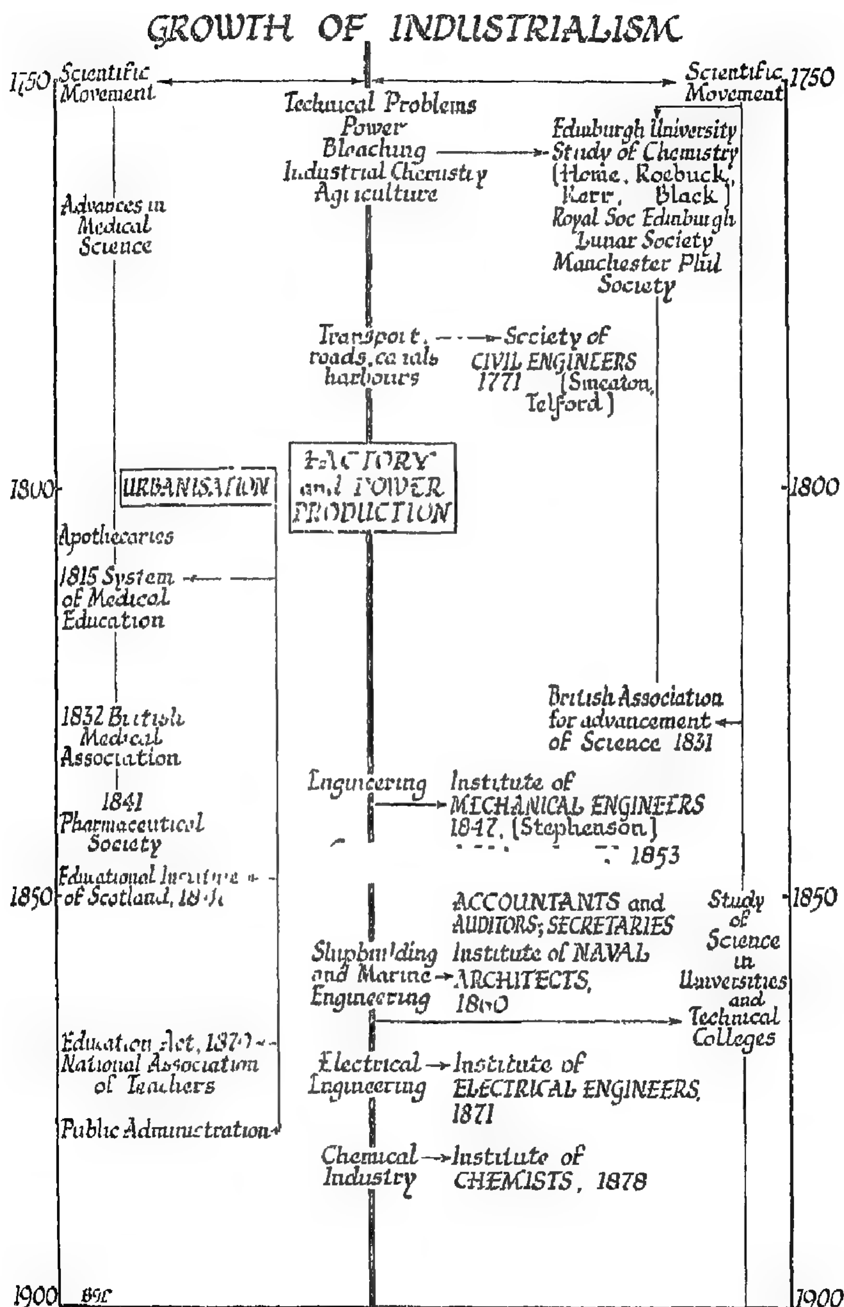
The need to provide scientists of all branches with a common meeting-ground led to the founding of the British Association for the Advancement of Science in 1831. Ten years later chemists themselves started an organization of their own. At first the Chemical Society was simply a study group, but the increasing part played by chemists in industry encouraged the proposal to demand a professional qualification of its members. Discussions were protracted, but the matter became urgent when the *Sale of Food and Drugs Act* of 1875 authorized the appointment of public analysts. Accordingly, a new society—the Institute of Chemistry—was founded in 1878. A few years later it received its charter. The Institute was given powers to hold examinations, to have the exclusive use of the titles F.I.C. and A.I.C., and to exercise discipline over its members. Chemistry had become a recognized profession.

ADMINISTRATION

Advances in technology have necessarily involved production on a large scale. The modern company counts its capital in millions of pounds and its employees in tens of thousands. In the early days of the Industrial Revolution it was common to find the owner or chief partner head of the business, directing its policy and carrying on the management. That phase quickly passed. As more and more capital was required, the number of partners increased, and this process was facilitated when a series of Acts, passed between 1855 and 1862, permitted creation of companies with limited liability. The advent of this type of business raised problems of industrial organization, of marketing, of labour organization, of finance, and the tendency has been for these functions to pass into the hands of salaried experts

One of the earliest professions thrown up by big business is accountancy. Scotland led the way. In 1853 associations of accountants were formed in Edinburgh and Glasgow. Later they were incorporated by Royal Charter. The exclusive right to a title is generally of great value to a professional body, and when the Edinburgh accountants hit on the title "chartered accountant" with the abbreviation C.A. the other Scottish societies followed suit. A General Examining Board to control all examinations was set up; and in 1915 a standing joint committee was established.

In England, professional accountancy developed after the passing of the Companies Act of 1862 and the Bankruptcy Act of 1869. An association of



TIME CHART 13 INDUSTRY AND THE NEW PROFESSIONS

Accountants was founded in Liverpool in 1870 Ten years later a charter was granted creating the Institute of Chartered Accountants in England and Wales Many accountants, however, elected to remain outside the Institute and others, partly because of the social barriers created by the enforcement of articles and the payment of large premiums, were unable to qualify for membership. The outcome was the founding in 1885 of a new body, the Society of Accountants and Auditors, which received a charter and later legal protection for the use of title "Incorporated Accountant." To-day the educational standards of these bodies are much the same, but because of social prestige the chartered accountants secure the lion's share of company and public work

The growth of large-scale production and company organization has been responsible for the employment of large numbers of salaried people in addition to those already mentioned. On the side of administration, there is a growing body of professional and semi-professional people. Every company must have a secretary, and in large companies such men or women require very special qualifications Sometimes such posts are held by accountants or lawyers, but to-day there is a professional body of secretaries The Institute of Secretaries came into being in 1891. A few years later it was incorporated as the Chartered Institute of Secretaries of Joint Stock Companies and other Public Bodies Like other professional bodies it holds examinations and demands certain qualifications of its members. As for accountancy, there is a rival body This is the Incorporated Secretaries Association, founded in 1907.

Besides secretarial staff, there are many other salaried employees in large businesses appointed on the basis of academic and other qualifications. Many firms to-day make staff appointments from university graduates. In the nature of things technical qualifications are not demanded, but promising men and women, with ostensibly intellectual attainments, are eagerly sought After the First World War many universities established departments of commerce and granted degrees in the expectation that there would be a demand for men and women with special qualifications in economics and allied subjects Whether they come from universities or from secondary schools, the significant fact is that the salaried staff in every department of business to-day plays an increasingly important part. They occupy managerial and administrative posts. They act as buyers and market experts and fill innumerable other posts in commerce and industry. Whether their education should have a definite bias to economics and problems of administration has been much debated In the belief that there is a technique of business management, the London School of Economics in 1931 established a Department of Business Administration

HEALTH

The Institutes share with the Universities, which were late-comers in the field, the task of maintaining standards of qualifications for expert employment in the profession of engineering. In medicine a similar dualism with no counterpart on the Continent, in the New World or in the Dominions, is also characteristic of Britain, more especially of England, where the

universities are now the cradle of medical research and the Royal Colleges of Physicians and Surgeons still offer the most highly coveted diplomas for consultative practice Circumstances which have encouraged the growth of professionalism outside the framework of standards set by the universities, in particular the exclusion of nonconformists and hence of a large section of the social strata largely contributory to the personnel of the professions till late in the nineteenth century, undoubtedly contributed to this state of affairs There were others, peculiar to the development of medicine itself.

The oldest medical schools of the Continent were started in the thirteenth century by Jewish missionaries of the Moorish culture, and Jewish influence has remained strong in the medical schools till this day. In medieval times several things made this inevitable. When Europe was largely illiterate, the Jewish boy, brought up to read the works of the Law, had a passport to the secular professions When papal bulls prohibited usury and the dissection of the human body, Jewish peddlars were free to specialize as bankers and Jewish scholars to prosecute researches in anatomy, undistracted by any temptation to enrich themselves by capitalist farming from which they were debarred by legal prohibition to ownership of landed estates. In Britain, they remained (p. 546) under a cloud from 1292 till Cromwell's regime brought them a respite, in striking contrast with prevailing misconceptions concerning puritan intolerance The Universities of Britain were slow to provide facilities for teaching medicine. Aberdeen, which had the first chair of medicine, founded in 1505, had no flourishing medical school for the next three hundred years. Oxford and Cambridge followed in 1547 after the first Act to regulate medical practice under Henry VIII Thus there were no flourishing medical schools in the Universities of Britain till the seventeenth century. The generation which followed Harvey were witnesses to the religious persecutions which closed its universities to the outstanding leaders of science produced by England during the next two centuries.

In England, the history of medicine as a profession goes back to the founding of the College of Physicians in 1518. For upwards of one hundred years this body played a notable part in the training of physicians and in the advance of medical knowledge Several of its leading members were among the founders of the Royal Society in 1662. But thereafter its usefulness declined as it became more and more exclusive and set more value on social status than on intellectual standards It shared its eclipse with the Universities of Oxford and Cambridge, whose medical schools were of little consequence until the present century The bodies authorized to make medical provision for society had failed in a duty they shared with the apothecaries, originally associated with spicers, pepperers and grocers in the sale of drugs and condiments from the East In the course of time, some of the fraternity specialized in dispensing as well as in selling drugs, a function recognized by an Act of 1542. In 1617 James I incorporated them as the Society of Apothecaries.

The exclusiveness of the College of Physicians and of the Universities drove people to look elsewhere for medical advice Apothecaries seized the opportunity Before the end of the seventeenth century they were general medical practitioners. The older privileged bodies naturally tried to check

this invasion of their territory (Fig. 51), but a famous court case of 1703 declared that

"the function of an apothecary consisted, not only in compounding and dispensing, but also in directing and ordering the remedies to be employed in the treatment of disease"

Being a lively body, the apothecaries set about consolidating their position. By an Act of 1722 their Society got authority to supervise all apothecaries in London. Twenty-six years later they were authorized to appoint a board of examiners. They thus came to be recognized as a lower order of medical practitioner, who indeed provided medical attention for the mass of the people in the eighteenth century. They competed with wholly unqualified practitioners, despite numerous efforts to reserve the field for qualified men alone.

In Scotland, the Universities, the Royal College of Physicians in Edinburgh and the Faculty of Physicians and Surgeons of Glasgow were the only licensing authorities. The last-named received a charter from James VI in 1599 giving it authority over surgeons, physicians and apothecaries throughout the burghs of Glasgow, Renfrew and Dumbarton and the counties of Lanark, Renfrew and Ayrshire. As in England, disputes occurred between the different branches of medicine. In Edinburgh, where apothecaries dispensed medicines and gave advice, there were frequent clashes with surgeons and physicians. Through their guild the former had authority over surgery in the city; and they used their power to check interference by the apothecaries It was not until 1681 that the Royal College of Physicians of Edinburgh was incorporated.

Unlike the London College of Physicians and the Universities of Oxford and Cambridge, the Edinburgh College of Physicians, and especially Edinburgh University, were active bodies in the advancement of eighteenth-century medicine. Drawing its inspiration and teachers from Leyden University, the Edinburgh medical school combined instruction with clinical practice at the newly-established Royal Infirmary, and quickly advanced to fame Its alumni soon established a high reputation for Scots medicine. The local surgeons broke away from the barbers with whom they had been incorporated in 1506, and founded the Royal College of Surgeons of Edinburgh in 1778. For more than a century to come Edinburgh, Glasgow and Aberdeen provided the best training in medicine and surgery in Britain. South of the Border such men as Hunter, Meade, Pringle, Lind, Blane and Jenner were illuminating some of the dark places of medicine and showing the urgent need for reform in face of the apathy and incompetence of the bodies charged by charter with the training of physicians. The English surgeons were displaying more initiative than the physicians. In 1745 they parted from the barbers, who were now reaping great profits from wig-making. The Surgeons' Company thus established gave place in 1800 to the Royal College of Surgeons of London. Forty-three years later it became the Royal College of Surgeons of England.

At the opening of the nineteenth century the condition of the medical profession was chaotic. On the top rung of the ladder were the physicians,

below them "the three inferior grades of surgeons, apothecaries and even druggists." This division was not based on intellectual standards or on professional specialization, but on social status. Many medical men qualified as surgeons as well as apothecaries, hence their designation as *general practitioners*. This body of surgeon-apothecaries took the first step to reform the standard of the profession. They promoted a bill in the House of Commons to check the practice of unqualified persons and to advance the professional requirements of the qualified The Act of 1815 gave the Society of Apothecaries the right to examine and license all apothecaries in England and Wales. Before this time qualification was obtained by serving an apprenticeship and "walking the hospitals." Some of the London hospitals had already established the beginnings of a medical school, but most formal instruction was obtained privately from individual physicians. It was largely as a result of the Act of 1815 that a system of medical education and examination came into being in England. Oxford and Cambridge had failed to give the instruction which was expected of them, and the London hospitals displaced them as centres of medical instruction. According to the Royal Commission of 1852, Oxford had "ceased altogether to be a medical school."

The new general practitioners, licensed by the Society of Apothecaries, naturally felt aggrieved at the pretensions of the physicians and surgeons who retained privileges without sufficient justification. A large number of licensing authorities with their own territorial limitations made the maintenance of a general professional standard impossible. Fully alert to the urgency of the problem, the practitioners formed several associations, the most notable being the Medical and Surgical Association formed at Worcester in 1832. Twenty-four years later this became the British Medical Association, soon to be the best organized and most powerful trade union in the country. The new associations demanded the abolition of the licensing powers of the older corporations and universities Controversy was acute, and two Parliamentary inquiries were held before the famous Medical Act of 1858 opened a new phase in the history of the profession. At the time it pleased nobody, though events have vindicated the wisdom of its promoters. It gave the medical profession statutory authority over the teaching and practice of medicine. It established an important body called the General Medical Council, representing the medical corporations of the United Kingdom and Ireland, the Universities, the medical profession and the Crown. In practice it has been a purely medical council Until 1926 no layman was ever a member.

According to the Act of 1858, the G.M C. has two important functions One is to keep a register of all qualified persons and to determine requisite qualifications. Within its framework the universities and other licensing authorities retained their powers to teach and to examine, but became subject to the ultimate control of the Council, which reserved the right to inspect them and to make recommendations concerning the curriculum. If dissatisfied with the standard of attainment at any centre, the Council can recommend the Privy Council to erase its name from the list The G.M C is thus in a position to enforce *minimum* requirements on all those who wish to register; but it has also a second function. The Council has the power to

remove from its Register those whom it regards as unfit or unworthy to practise. There is no appeal from its decision

Unlike the General Medical Council, the British Medical Association is not a statutory body. It is a professional body with strong trade union activities Its main concern is with conditions of employment, salaries, and professional etiquette. To-day it is a very powerful body with a membership of 35,000 or almost three-quarters of all the medical men in Britain. There are rival associations, such as the Medical Practitioners' Union, but they are small and unlikely to challenge the larger organization. During the National Health Insurance Act controversy, the B.M A. marshalled its forces, bargained collectively, and threatened to use the strike weapon. By black-listing local authorities and by refusing advertisements in its official journal, it has forced public bodies to pay what it regards as adequate salaries The lively interest of the medical profession in status, conditions and salaries is shown not only in the activities of the B M.A. but in the influence it brings to bear on the G.M.C on any matter pertaining to professional etiquette.

Originally the apothecaries dispensed and sold drugs To-day, as everyone knows, that is the job of the "chemist" and druggist or pharmacist, as he is more properly called As the apothecaries invaded the preserves of the physician, the chemist and druggist occupied the ground they vacated. At first the apothecaries tried to check this invasion and when they found this impossible, they sought powers to control it but without effect. In 1829 the chemists formed the General Association of Chemists and Druggists of Great Britain. In 1841 this became the Pharmaceutical Society.

TEACHING

Teaching is one of the oldest professions, yet it is only within the last two generations that it has acquired the status of a distinct profession Unlike physicians and surgeons, teachers had no medieval organization. Teaching was a function of the Church; and in England a close association has persisted to the present day Headmasters of the so-called "public" schools are often clergymen, who regard their appointments as a step in the ecclesiastical ladder

In Scotland, the emergence of a teaching profession occurred much earlier than in England John Knox himself was the author of a scheme to utilize church revenues at the Reformation so as to provide every parish with a school, and hence to provide the nation with a secular teaching profession. It was never completely carried out. Right down to the nineteenth century the Church kept a tight grip on schools and schoolmasters. By this time, however, public opinion was ripe for great advances The Education Act of 1872 abolished religious tests for schoolmasters and transferred to the universities the duty of examining the qualifications of teachers, while the newly-established Scottish Education Department instituted a system of inspection of schools.

Like medical practitioners, teachers have created professional associations to represent their common interests. Scotland was first in the field with an Educational Institute founded in 1847. Its manifesto declared.

"As the office of a Public Teacher is one of great responsibility, and of much importance to the welfare of the community, as it requires for its right discharge a considerable amount of professional acquirements and skill, and as there is no organized body in Scotland whose duty it is to ascertain and certify the qualifications of those intending to enter upon this office, and whose attestation shall be a sufficient recommendation to the individual and guarantee to his employers, it is expedient that the Teachers of Scotland, agreeably to the practice of other liberal professions, should unite for the purpose of supplying this defect in the educational arrangements of the country, and thereby of increasing their efficiency, improving their condition, and raising the standard of Education in general "

The immediate aim of the Institute was self-government of the profession and to that end it secured a Charter in 1851; but owing to the jealousy of the Church, as well as to the increasing part played by the State in education, the teachers have never received the right to license the members of their profession After the Education Act of 1870 there was formed in England a National Association of Elementary Teachers,

"to unite together, by means of local associations, public elementary teachers throughout the kingdom, in order to provide a machinery by means of which teachers may give expression to their opinions when occasion requires, and may also take united action in any matter affecting their interests."

In 1889 the Association discarded the word Elementary from their title, and admitted all certificated teachers Later it became the National Union of Teachers.

"The Union," it is officially declared, "is neither an Incorporated Professional Institute nor a Trade Union, but it combines the best features of each, with certain functions peculiarly its own "

It concerns itself with salaries and status, but it also devotes much attention to the advancement of education. In the post-war period it did valuable service in raising the salaries of teachers of all grades It is by no means as inclusive as the B M A , which takes Scotland as well as England within its parish, and in England it competes with several rival organizations whose existence reflects the social stratification of English education and the existence of a large body of teachers trained in colleges which enjoy a lower social prestige than the universities and offer inferior educational facilities.

PUBLIC ADMINISTRATION

In one form or another state service is very ancient In medieval times the high offices of State were held by church dignitaries. The Reformation ended this association; but for many centuries there was no civil service in our modern sense Appointments were in the patronage of ministers of State and emoluments were generally derived from fees charged to the public for service rendered. The political movement, which achieved its first triumph in 1832, was more than a movement for a more equitable distribution of the

franchise; it brought its influence to bear on every aspect of social and political life. Municipal administration, factory conditions and public service of all kinds came under the lash of its constructive criticism By an Act passed in 1853, it swept away the system of patronage in the Indian Civil Service and decreed that appointments should henceforth be through public examination. The logic of the same policy as applied to the home public service was irresistible. Following the recommendation of a Committee, the Civil Service Commission was established in 1855

"to conduct the examination of young men, proposed to be appointed to any of the junior situations in the Civil Establishment."

By subsequent steps, culminating in the Order in Council of 1920, the whole civil service was thrown open to examination Meantime new problems of municipal government were being tackled. The Municipal Reform Acts of 1833 and 1835 placed the government of all large towns in the hands of elected town councils, and from this point a local civil service dates its origin.

Unlike the state civil service, local government numbers a high proportion of technical experts among its employees—civil engineers, electrical engineers, gas engineers, medical officers, directors of education, lawyers and so on. In all departments there are also large clerical and administrative staffs. There is no statutory machinery of admission by public examinations. Like other large-scale enterprises, local authorities are free to recruit their employees on the basis of standards imposed or maintained by professional bodies or by diplomas of recognized centres for instruction.

The national civil service is thus encumbered with an apparatus of personnel recruitment peculiar to itself, and called into being by circumstances utterly irrelevant to modern needs. A general examination, prescribed as a safeguard against patronage and corrupt practice at a time when the English universities were either decadent or infantile, selects candidates for employment on the basis of scholastic qualifications which have no necessary connection with their future tasks and excludes those who, with accredited qualifications for such tasks, have little inclination to undertake the risk or drudgery of preparing for additional tests with uncertain prospects of reward Two wars which have called for a considerable expansion of civil service personnel have exposed this anachronism as a powerful force for conservatism by banishing initiative and expert knowledge from scope within the bureaucratic machine, as it functions between one war and another. Little short of a social cataclysm will rid the Homeland of the archaic incubus it owes to the Act of 1855.

THE NEW MIDDLE CLASS

The rise of the professions touched on in this chapter is one of the most significant features of recent history. Both in America and in Britain their numbers and their importance are increasing. They represent the most important element in the diverse congeries of social groupings called *middle class.*

Progress of specialization in the economic system has created a bewildering

variety of occupations, yet we rightly group certain ones together People of these groups are not necessarily conscious of common interests, but when a time of testing comes they draw together by irresistible social forces. Karl Marx stressed the social cohesion of wage-earners accustomed to similar standards of living and united by a common social outlook. The middle class is less homogeneous. Within it there are wider differences of pay, of intellectual attainment and of social contacts. What gives it a certain measure of cohesion is less the consciousness of its unity than realization of its differences from others. By tradition and education, by possession of property, it draws closer to the wealthy than to the wage-earners, but the segment discussed in this chapter is wedded to neither. Its professional interests place it in a category by itself. It occupies a position of immense potential power in contemporary society. Without its interest and support no fundamental scheme of social reform can be carried out

According to the Census of 1931 professional workers in Great Britain numbered three-quarters of a million. Though this represents only 8 per cent of the occupied population, it is larger than the numbers returned in the 1921 census by 80,000, an increase proportionately more than the increase in the occupied population. Thus the proportion of the total working population represented by the professional classes is growing in Britain, and this is true of all economically advanced countries The following table is from Carr-Saunders and Caradog Jones (*Survey of the Social Structure of England and Wales*, Oxford, 1937, 64). The reason for the large number of professional women is found in the fact that the majority of teachers are women.

PROFESSIONAL OCCUPATIONS

ENGLAND AND WALES, 1921 AND 1931

Occupations connected with	Nos. Occupied (000's)				Per cent of total	
	M.	F	Total 1931	Total 1921	1931	1921
Teaching	84	200	284	278	38	42
Medicine and Care of Sick	73	154	227	171	31	26
Religion	44	15	59	56	8	8
Consultant Engineering, Analytical Chemistry, and other Sciences	61	3	64	38	9	6
Law and Accountancy	33	0	33	25	4	4
Art and Architecture	20	6	26	23	3	3
Writing and Publication	19	7	26	16	3	2
Other Professional Occupations	10	4	14	12	2	2
Articled Clerks, Pupils and Other Students	13	0	13	48	2	7
Total	357	389	746	667	100	100

The middle class, as we customarily use the term, is a medley of social groups—small tradesmen, agents, salesmen, professional practitioners and

highly trained technicians, with little in common except lack of those characteristics which distinguish them, on the one hand, from the wealthy rentier or directors of large-scale industry, on the other from the wage-earner, small peasant or huckster Between the small businessman who passes as one of its members and the director of a large industrial corporation there is no hard and fast line. Nor is there a clear-cut boundary between the skilled wage-earner and the professional employee At one time, the skilled wage-earner was easily definable as such, and the same definition still holds good for a large body of employees whose employment depends on no special educational qualifications What distinguishes them from the unskilled workman is that their eligibility for such specialist work as they do depends on a period of apprenticeship; and what distinguishes them from the professional employee is the special qualifications the latter owes to facilities of instruction prior to employment. Where professional employment depends on a specialist diploma or degree conferred at the end of a period of higher instruction, the definition of the professional employee is also clear-cut, but modern educational facilities admit of many levels of higher education and the continuation school threatens to supplant apprenticeship to a trade A great expansion of clerical work and of the distributive trades has encouraged a growing demand for employees with a certificate of secondary school education, and the modern polytechnic offers a great variety of diplomas open to candidates with no schooling beyond the primary level.

To this extent the barriers between the middle class employee and the artisan are becoming blurred, as, for other reasons, the boundary between skilled and unskilled wage-earners is becoming less sharp; and further extension of educational facilities must make it still more blurred. As technical education invades the province of industrial apprenticeship, one of the most conservative forces of production will operate with diminishing intensity. *Inter alia* the stability of an economy depends partly on availability of raw materials for production, partly on availability of personnel with productive skill In the past, apprenticeship has been the chief means of ensuring availability of skilled personnel, and established industries of one country or district have continued to thrive in competition with young industries in countries or districts with more ample natural resources for successful activity Before the liquidation of illiteracy by universal education the transmission of skill depended largely on example and word of mouth When the creation of a new industry in a more favourable situation had to await importation of skilled personnel from elsewhere, the introduction of a productive technique might depend on the accidents of war, political repression or religious persecutions which drove the craftsman from his home or the artisan from his homeland. Modern knowledge makes it possible to plan the location of industry without recourse to large-scale migration, by organizing the transmission of skill in a new way. It thus speeds up the interval between the decline of an industry which has exhausted its resources of accessible raw materials or economical power in one situation and the birth of an industry in a locality which offers special resources of raw materials or power for its use.

One conclusion which emerges clearly from the record of professionalism

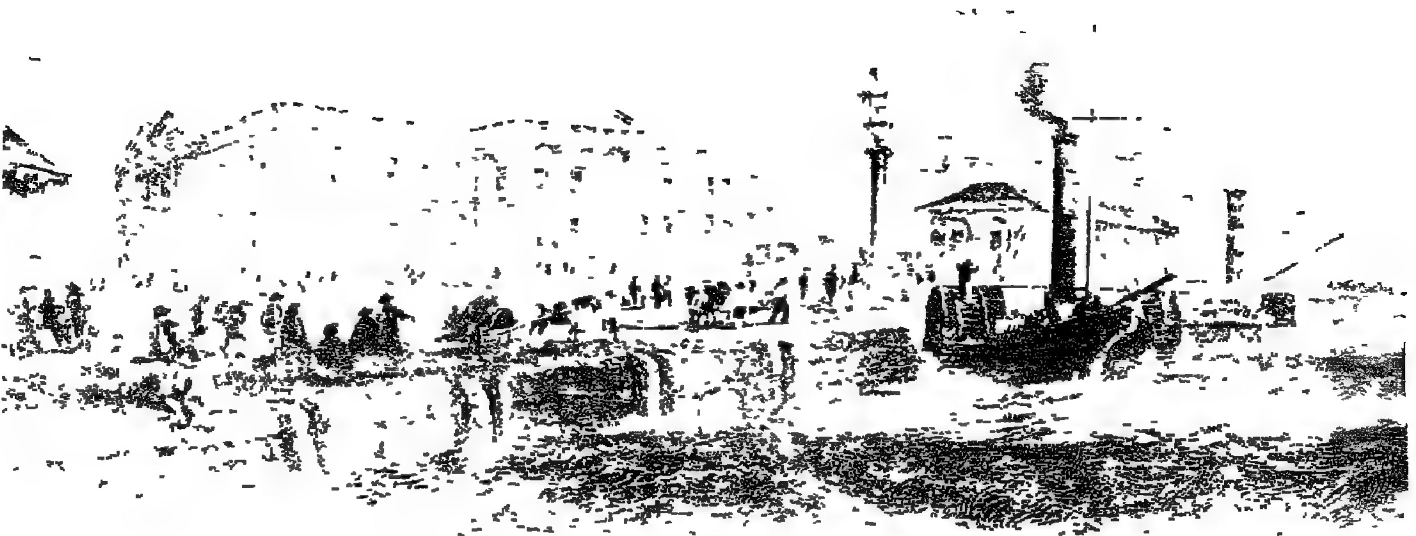


FIG 65 EARLY STEAMBOATS AT GREENOCK, 1820

(Two Centuries of Shipbuilding, *by permission of Scott's of Greenock and the Editor of* Engineering)

In the foreground, two paddle steamers, of primitive appearance and only fit for river sailing, indicate the beginnings of a new era of sea transport In the background are the tall masts of sailing ships, still supreme on the high seas for another fifty years No one then thought the steamer capable of long voyages in the open sea

(See p 350)

THE MAJESTIC,

Captain OMAN,

AND

THE CITY OF GLASGOW,

Captain CARLYLE.

Sail from GREENOCK every MONDAY, WEDNESDAY, and FRIDAY, at One o'Clock in the Afternoon, and from LIVERPOOL, every MONDAY, WEDNESDAY, and FRIDAY, at Ten o'Clock in the Forenoon, calling off PORT PATRICK, and at DOUGLAS, ISLE OF MAN, both in going and returning from LIVERPOOL.

These Packets carry no Goods, being expressly fitted up for the comfort and accommodation of Passengers.

FARES.

For the First Cabin, including Provisions and Steward's Fees

	To Port Patrick	To Isle of Man	To Liverpool	To Greenock
From Greenock,	£1 1 0	£1 10 0	£2 [illegible] 0	£0 0 0
Port Patrick,	0 0 0	1 1 0	1 11 0	1 1 0
Isle of Man,	1 1 0	0 0 0	0 17 6	1 10 0
Liverpool,	1 11 0	0 17 6	0 0 0	2 5 0

For the Second Cabin without Provisions.

	To Port Patrick	To Isle of Man	To Liverpool	To Greenock
From Greenock, -	£0 10 0	£0 10 0	£0 10 0	£0 0 0
Port Patrick,	0 0 0	0 10 0	0 10 0	0 10 0
Isle of Man,	0 10 0	0 0 0	0 0 0	0 10 0
Liverpool, -	0 10 0	0 0 0	0 0 0	0 10 0

Children under Twelve Years of Age Half Fare

ON DECK.

A Coach, - - -	£4 15 0	A Horse -	£2 10 0
A Chaise, - - -	4 0 0	Dogs, per couple, -	0 10 0
A Gig - - - -	2 10 0		

Parcels Forwarded to the Isle of Man and all Parts of England.

[illegible] Value of [illegible] expence [illegible] tours

May 1, 1826

JAMES LITTLE, *Greenock,*

FIG. 66 THE *MAJESTIC* SAILING BILL, 1826.
(David Napier, 1912, *by permission of Jackson, Son & Co*)

The steamers referred to in this *Sailing Bill* were among the first to take part in the coasting trade Designed "for the comfort and accommodation of passengers," they sailed between Greenock and Liverpool, completing the journey in about twenty-five hours

(See p 350)

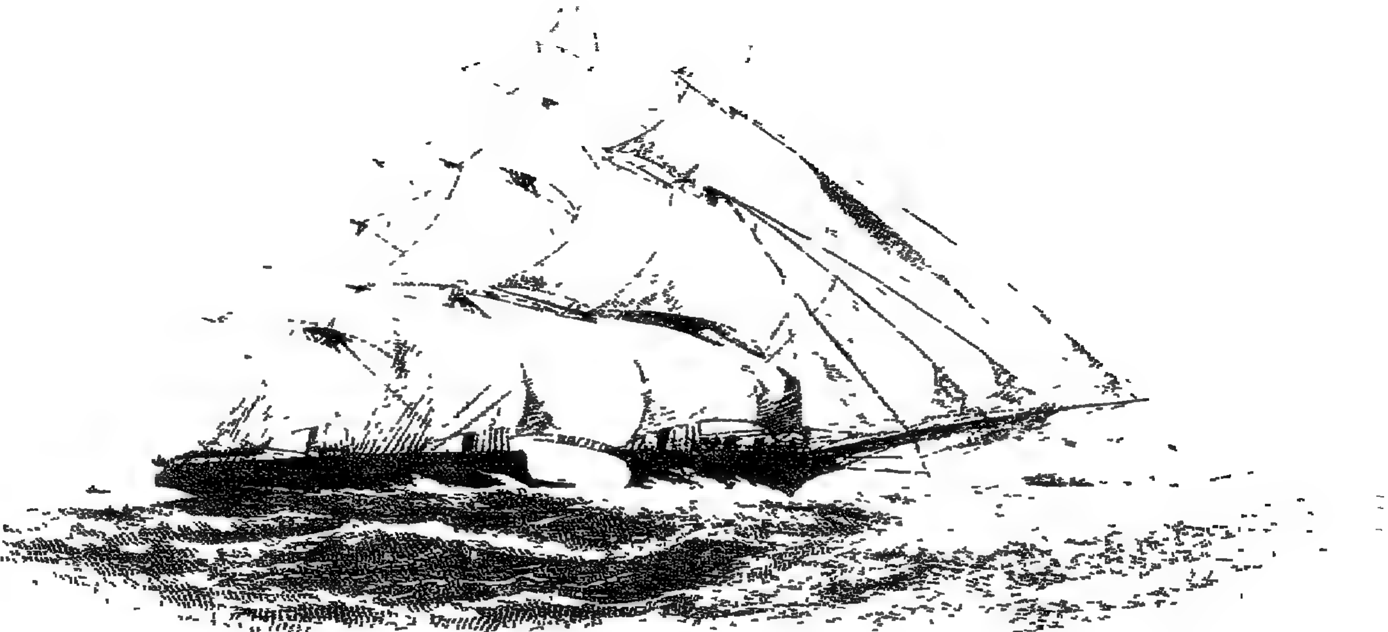


FIG 67 THE GREAT SHIP-RACE FROM CHINA TO LONDON THE *TAEPING* AND THE *ARIEL* OFF THE LIZARD.

(*By permission of the* London Illustrated News)

This was one of many famous races from China with the first of the tea crop The *Clipper* here shown is graceful and speedy, for many years maintaining supremacy on long voyages, especially to China and Australia The ordinary sailing ship was clumsy by comparison, heavily built, designed for cargo rather than speed The contrast with the East Indiaman (Fig 48) is less striking

(See p 351)

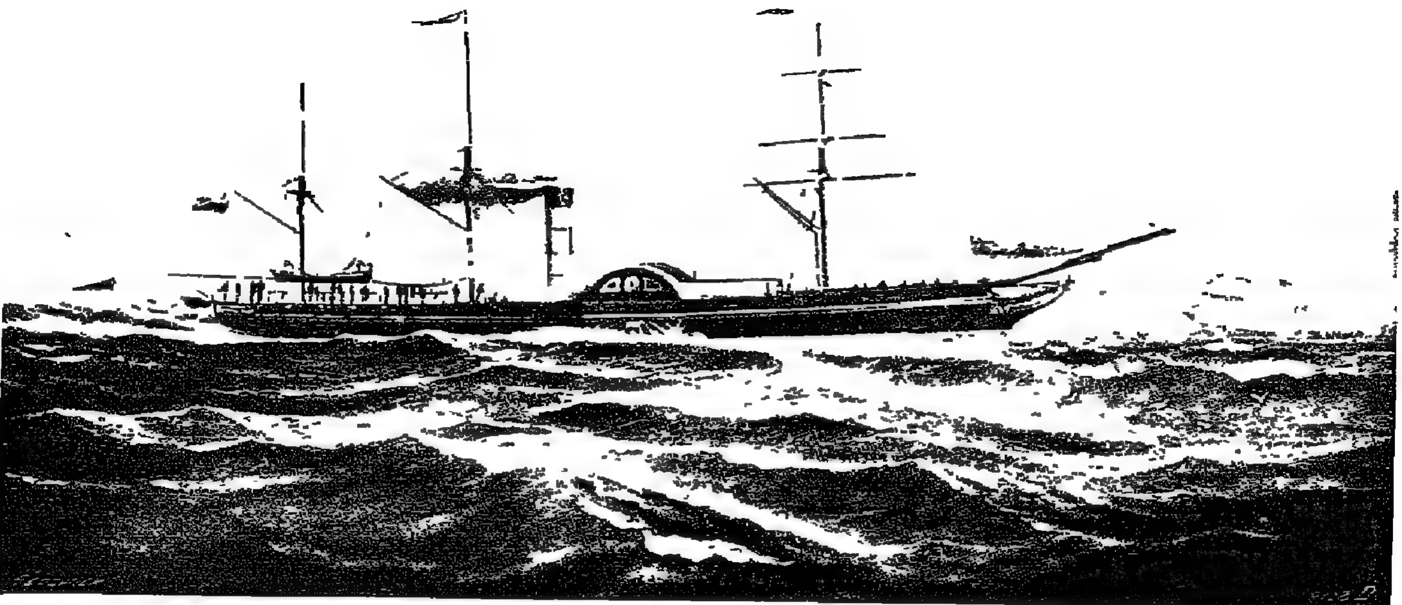
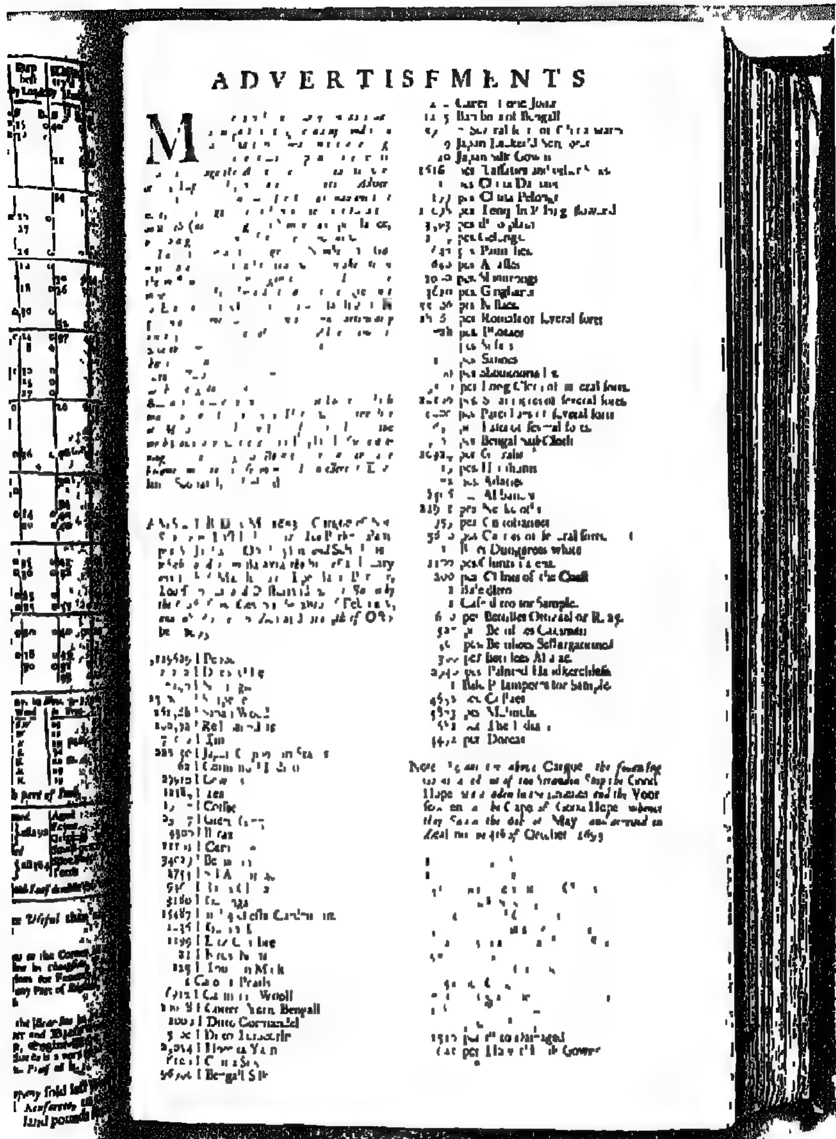


FIG 68 SCOTT'S FIRST P & O LINER, *TAGUS*.

(Two Centuries of Shipbuilding, *by permission of Scott's of Greenock and the Editor of* Engineering)

This ship, built in 1836–37, started a long association of Scott's of Greenock and the Peninsular and Oriental Shipping Company Still equipped with sails, the *Tagus* registered a great advance in design, construction and power on earlier steamboats She was a *paddle* ship, but the screw or propeller had been invented before she was completed Controversy on the relative merits of paddle and screw continued for another ten years

(See p 352)



ADVERTISMENTS

FIG 69. ADVERTISEMENT FROM HOUGHTON'S COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE, 1693

This advertisement shows the kinds of goods so much sought after in India by Europeans—silks, cottons, chinaware, tea, coffee, pepper, nutmeg These new commodities for which Dutch, English and Portuguese competed, enriched the lives of Europeans by giving them a more varied standard of living Their use, of course, met with opposition especially from the woollen manufacturers, but they stimulated the new silk and cotton industries

(See p 366)



FIG. 70 THE SHOP OF A LONDON TOBACCONIST IN 1617

(*MacInnes,* The Early English Tobacco Trade, *by permission of George Routledge & Sons*)

In the window are pipes, flagons, jugs and bottles, and the model of a negro boy smoking a vast cigar, and carrying another under his arm Above the doorway hangs a picture of a *Nicotiana* (tobacco plant) plantation, with negro figures, two running and one swimming The drawn curtain reveals three smokers at a table supported on kegs of tobacco Their names are given as Captains *Whiffe, Pipe* and *Snuffe*

(See p 370)

CAROLINA.

THe *Company* for *Royal Mines*, Copper and other Works in Cumberland, *&c.* having a Grant from the *Lords Proprietors* of the Province of Carolina in America of all the Mines Royal and other Mines with any subterranean Treasure that shall be discovered in the said Province

These are to give notice, That any Person well understanding Mines, Minerals, *&c.* and the art of mining, may apply themselves to the Committee appointed for managing the same, sitting at Mrs. *Vernon*'s Coffee-house in *Bartholomew*-Lane behind the *Royal Exchange* every *Tuesday* at four a Clock in the Afternoon. And if desirous to serve the said Company in *Carolina* aforesaid, may have encouraging Proposals made them for the same.

That there are Mines of exrtaordinary value in *America* we reed no other Evidence than the Treasure *Europe* now possesseth, which is supplied by a Yearly Import of Collom by the *Spaniards*,

Also that there are Mines of equal Value with those possessed by the *Spaniards* in the vast and promising *Apalathean* Mountains which lie in *Carolina*, for 700 Miles in length and are 20 or 30 Miles over, we ueed not doubt, since they lie in the same degree of Latitude with *Mexico, &c.* and are very much noted by Writers for the great Treasure they possess; particularly *John de laet*, of *Antwerp*, *Anno* 1633 in his History of the *West-Indies*; which is confirmed by the unanimous report of the *Indians*, as well as those that have been Eye-witnesses thereof who have brought from thence divers Minerals of good value even from the very surface.

The Country is very pleasant, and the most Southerly of all our *English* Settlement on the Continent, which gives it Preference in many respects to all others, it lying in the same Latitude with *Barmoodoes* and the Land of *Canaan*, (a Climate so much celebrated) and plentiful in Provision both for Sustenance and Exportation; Beef being about 10*s.* the Hundred. Pork 14 *s* also Wheat, Rice and most other Products of *England* abound, that Trade and Settlement much increasing, many Ships going thither this Year with some hundreds of Passengers.

This Company is printed in my Account of Actions of the Name of the *Carolina* and *Cumberland* Royal Mines.

FIG 71 ADVERTISEMENT FROM HOUGHTON'S "COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE," 1694

This is the advertisement of the Company of Royal Mines, chartered in 1568 to mine copper and precious metals in England, and now in 1691 considering mining in Carolina The high hopes of the promoters were scarcely realized The text of the illustration shows one method of attracting home labour for colonial enterprises

(See p 372)

THe Territories from whence came most Ships to London last Year next to Germany, were the English Plantations in the West Indies, and from thence came 138. What, not two Thirds of the Number of what came from the ... Country of the United Provinces. Surely their Prudence and Industry are much to be commended and imitated, and whether 'tis our Idleness, Fearfulness, Losses, or other Employments of our Men and Ships, by reason of the War, I won't determine; but one would think that from Hudson's Bay, New England, New York, New Jersey, Pensylvania, Virginia, Carolina, on the Main, and Bermudas, Jamaica and four other Islands in the Ocean ... more especially, considering ... in his Map of Commerce, says that 400 Ships have been loaded at Barbadoes in one Year, 1660 and there were upwards of 15505 Tuns, which were about ... this Island is but ... which being mea... of the Plantations ... side might be vast ... but a great many of them yield more bulky Commodities, and it might surely (if we would) employ many more Ships; altho I am not ... of many Ships ... from the West Indies to divers others of our Ports ... how many, I know not, altho the ... are as eleven to fifteen of the ... divers Ships with ... our Ports, and pay the Duty, then relade, and so for Holland.

The same Mr Roberts says, there are about 40 Sail a Year laded from Virginia and 10 from Maryland of three or four hundred Tuns each; and I presume by these he means not the West Indians Trading, one with another; and doubtless the Trade has been far greater since then Mr Roberts speaks of.

... Trade, I believe it ... some body's Business ... as can be, and to study how every thing therein may be improved, and what useful known matters grow in other Countries, that in Probability ... Trade for Bl... be carried ... their Plenty ... Company in Suspence, they shall exclude others, or not be of use to us, will belong to another Argument.

On November 24 1681, in Number 3 of my first Quarto Volume I published my Thoughts to prove that the Plantations did not depopulate, but rather encrease or improve our People; and I have also proved it so that none will gain say me, that the more People we send to our Plantations, the more we must have at home, so long as ever it can be imagined that People will love their Interest, but thither I refer my Reader, and on Friday next expect more from

Yours,

John Houghton, F. R. S.

From the Golden Fleece in Grace Church Street, and Corner of Little East Cheap ...

FIG 72 EXTRACT FROM HOUGHTON'S "COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE, 1695"

Houghton was intensely interested in development of English commerce. Between 1692 and 1703 he issued a periodical containing information about ships and foreign trade His own lively, well-written and stimulating "editorials," this one dated December 20, 1695, reflect the commercial views of the time, as in stressing the value of the West Indies in Britain's imperial trade His suggestion that it should be "some body's Business to make a good Natural History as well as can be, and to study how every thing there may be improved" is in refreshing contrast to the doctrines of Malthus current in the nineteenth century

(See p 372)

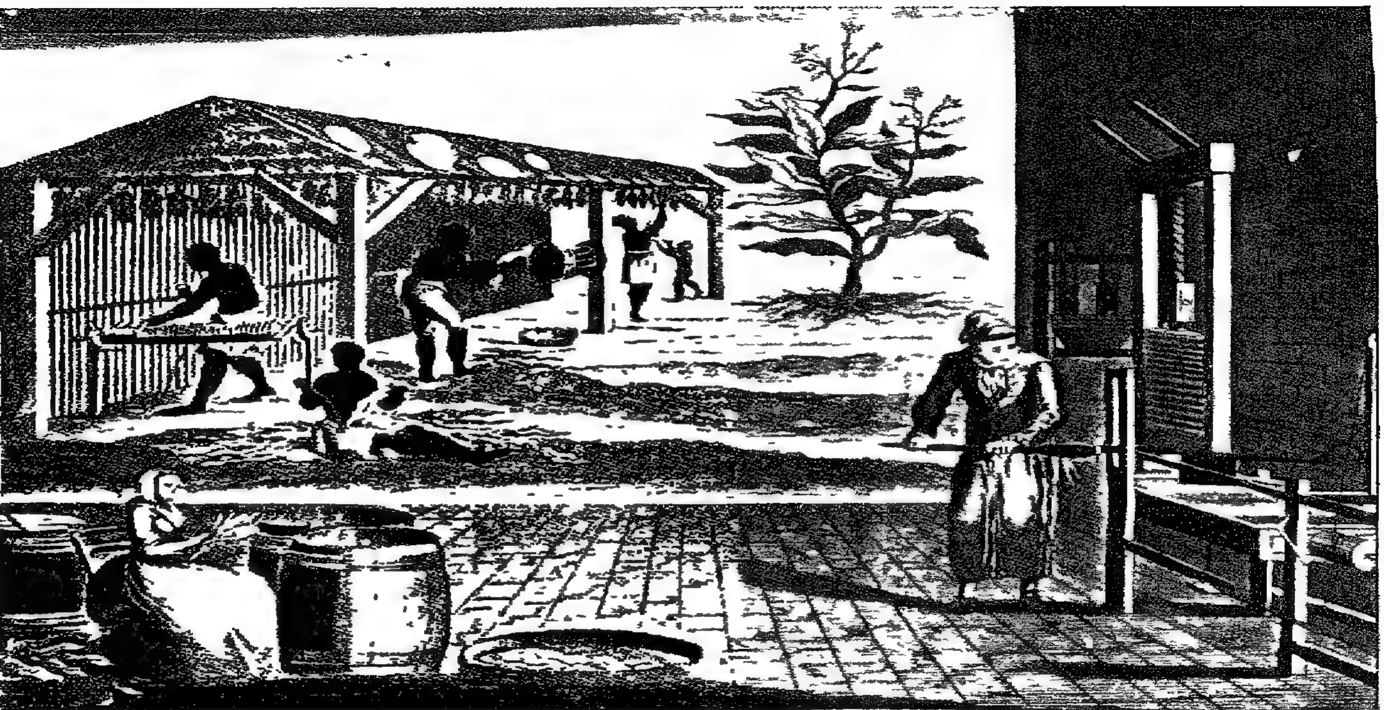


FIG 73 A TOBACCO FACTORY IN THE MID-EIGHTEENTH CENTURY

(*MacInnes,* The Early English Tobacco Trade, *by permission of George Routledge & Sons*)

Growing and preparing tobacco required much labour for the various processes—spinning or rolling, picking leaves from branches, pressing and cutting cakes—here shown Notice the slaves whose primitive clothing provided a market for the coarse linen industry of Scotland The tobacco plant in the background is not, of course, drawn to scale

(See p 380)

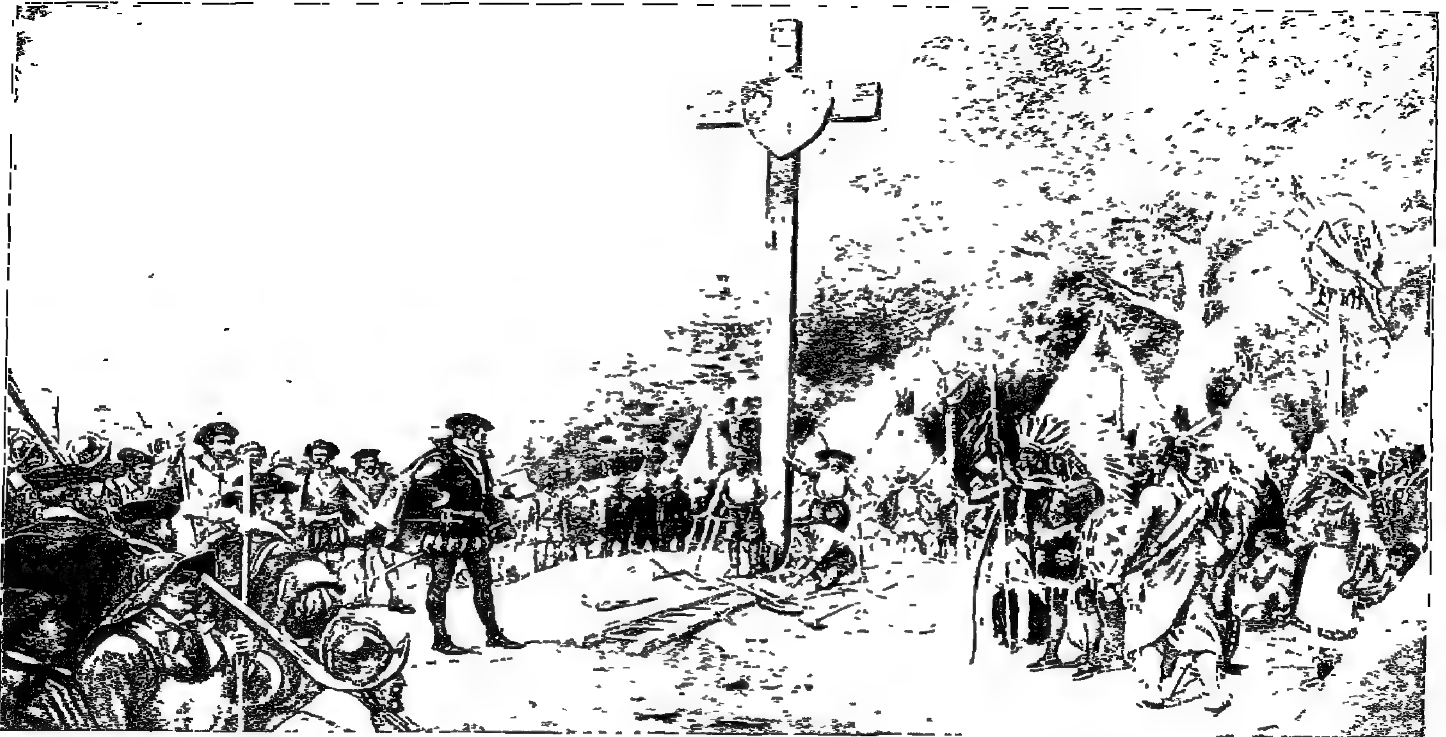


FIG 74 CARTIER TAKES POSSESSION OF CANADA, 1534

(*By permission of the High Commissioner for Canada*)

France's first contact with the New World was when Cartier subdued the natives by force of arms, and so founded *New France*, or Quebec

(See p 383)

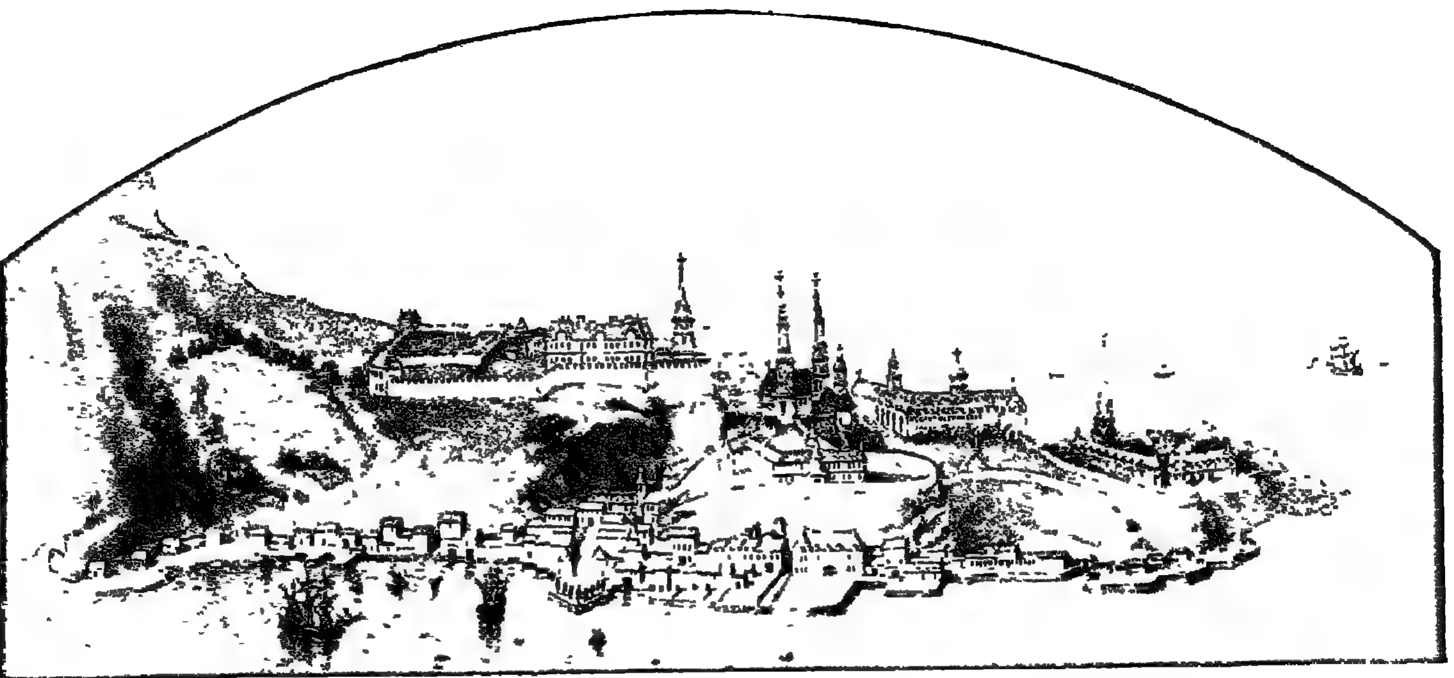


FIG 75 QUEBEC IN THE SEVENTEENTH CENTURY (1663)

(By permission of the High Commissioner for Canada)

Fig 74 showed France's first contact with Canada Here we have evidence of colonization and settlement, a French town on Canadian soil, with churches, harbour and houses along the sea shore, as in fishing villages on the Brittany coast whence came many of the settlers The wall betokens that Quebec was still a fortress in a strange land, ready for defence against native or European

(See p 384)

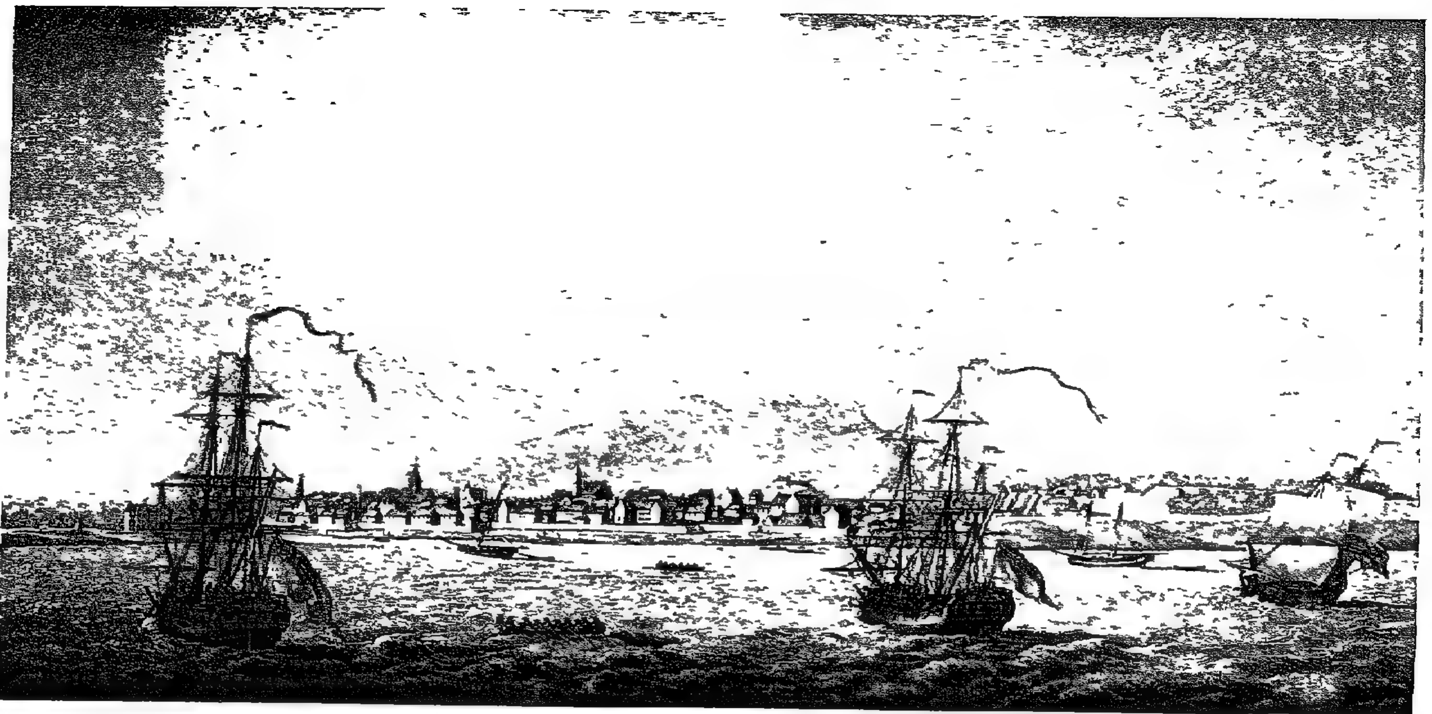


FIG 76 MONTREAL IN THE SEVENTEENTH CENTURY (1685).
(*By permission of the High Commissioner for Canada*)

Some 150 miles up stream from Quebec, Montreal had a very favourable position at the junction of the Ottawa River and the St Lawrence which provided a means of communication with the Great Lakes, centre of the fur trade, without recourse to the rapids of the Upper St Lawrence It was also within reach of New York by Lake Champlain and the Hudson River In its style of architecture and in its social and religious set-up a French town, like Quebec, it thus became an important distributing centre for trade between the Great Lakes and Quebec on the one side, and New York on the other

(See p 384)



FIG. 77 GARRAWAY'S COFFEE HOUSE, 1671

(By permission of the High Commissioner for Canada.)

A very elegant clientele here assembles to view the produce and to offer good prices for an article much desired by upper and middle class women. It is the beginning of the Hudson's Bay Company's sale of furs in England. This was the outcome of a long train of economic effort and exploration, stretching back to the uttermost corners of Canada, linking traders and trappers and native Indians and shippers with the fine ladies of London.

(See p. 384)



FIG. 78. OLD TRAPPER.

(By permission of the High Commissioner for Canada.)

This takes us back to the start of the fur trade The trapper, one of the scores of men employed by the "Great Company," is also an explorer, blazing new trails across Canada in search of furs, and so adding to knowledge of the vast interior It was a life of adventure, of privation and of danger

(See p 305)



FIG 79 THE GOVERNOR OF RED RIVER, HUDSON'S BAY, VOYAGING IN A LIGHT CANOE, 1824.

(By permission of the High Commissioner for Canada)

The Governor, with top hat, proceeds on his tour of the area under his charge in what was the only mode of travel in this land of a thousand lakes and rivers and marshes The natives have been pressed into the service of white men in search of furs. Their knowledge of waterways, of rapids and of routes were of incalculable benefit to the authorities of Hudson's Bay Company. (See p 395)

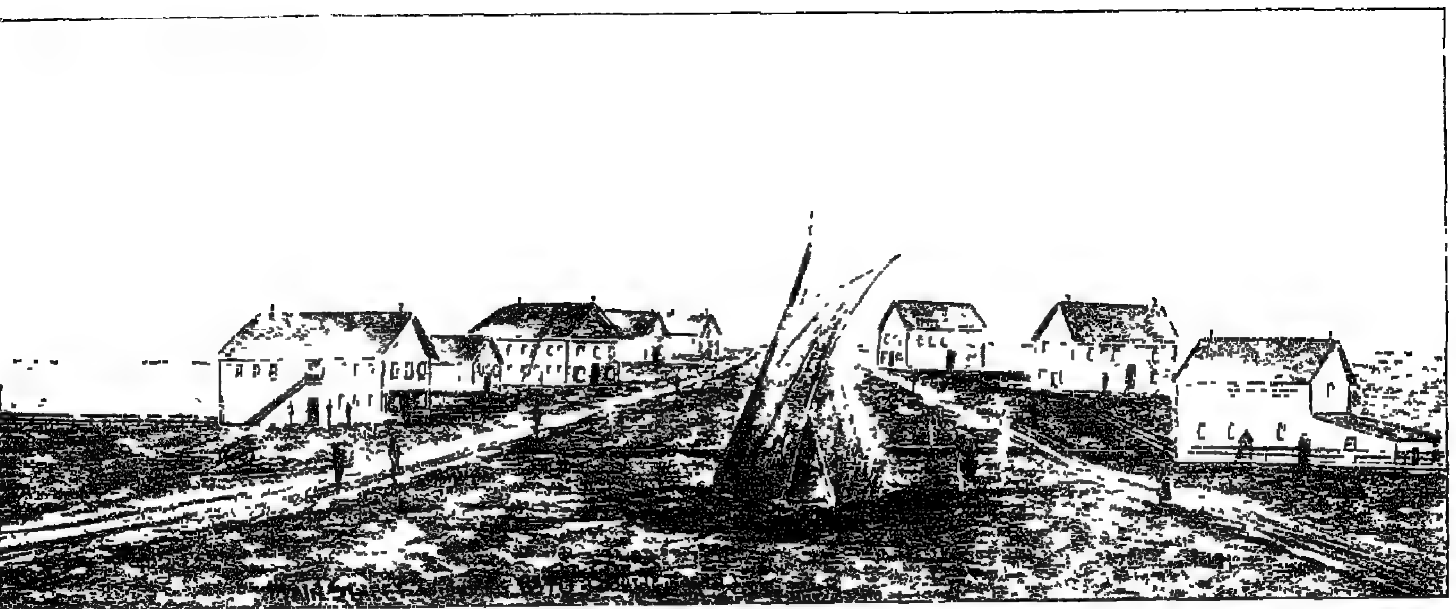


FIG 80 WINNIPEG, 1871.

(By permission of the High Commissioner for Canada)

Less than 100 years ago Winnipeg was a mere cluster of wooden houses standing in a vast plain Some of the inhabitants were pioneers in farming Others were traders of the Hudson's Bay Company For either a new life in Canada offered a prospect of hard and unremitting toil In the foreground is a wigwam, significantly alone

(See p 398)

during the past century is that the body of employees has grown steadily as one profession after another has come into existence. Some, like teaching, have already come almost wholly within the framework of the public services; others, like medicine, are clearly in process of doing so in our generation. To that extent the orthodox Marxist analysis of the evolution of capitalism has been justified and is being justified by the course of events. On the other hand, the enlargement of the general body of employees by the absorption of this new middle class into its ranks has not been accompanied by a general levelling down of living standards. To maintain its existence, monopoly capitalism has had to enlist in the service of the rentier a personnel whose efficiency on behalf of, and whose loyalty to, the system exacts a heavy price. The privileges it enjoys within the *status quo* confer on it an influence out of all proportion to its numbers, and a political programme which discounts its influence does so at its peril.

CHAPTER XII

THE LABOUR MOVEMENT

THE medieval craftsman bought his own raw materials, worked with his own tools in his own home and marketed his own product. We have now seen how the growth of the capitalist system of production divorced the craftsman, first from the raw materials of his trade, then from the tools with which, and the home in which, he worked. When capitalism reached the peak of its development in the nineteenth century, the worker had nothing to sell except his labour. The social gulf which now separated him from the manufacturer, the mill-owner or the mine-owner was now wellnigh impassable. As one industry after another came under the domination of power production and the factory system, the fate of the craftsman was sealed. To some who surveyed the social process which replaced craftsmanship by wage labour the outcome seemed equally inevitable. There must needs be a final showdown between two opposing groups, the employees and the employers. In their hour of victory the former would then liberate themselves, and mankind as a whole, from the intellectual, economic and political domination of the capitalist class. A classless society would thus inevitably supersede capitalism.

To date, the outcome has not been so dramatic in any society already highly industrialized within the capitalist framework. Nor is there any certainty that it will be. The social trends which fortified such hopes in the middle of the nineteenth century had already run their course by that time. As we have seen in our last chapter, the disappearance of the craftsman was offset by the emergence of a professional middle class. New types of specialization created the demand for new types of skilled workmanship. The requirements of urban civilization and expanding commercial enterprise had initiated the liquidation of illiteracy. Universal schooling was to bring in its train the night school and the polytechnic, which have blurred the boundary between the province of the skilled artisan and that of the middle class employee. A new and expanding middle class was in process of emerging. The belief that society was separating into two polar opposites, a depressed proletariat and a parasitic rentier, was not vindicated by the sequel to events which encouraged its reception, and its persistence in our own time is a menace to a sound assessment of the constructive possibilities ahead of us.

None the less, the rise of capitalism has everywhere brought into being a class of wage-earners whose employment depends on the owners of capital and the working of the price mechanism. Wherever it has flourished, it has drawn the workers together for mutual protection. Before the Industrial Revolution there were isolated cases of trade unions or trade clubs in industries, such as the West of England cloth trade, where cleavage between the aspirations of employer and employee was deepest. Such unions were local and their aims were limited as compared with those of a modern trade union. There was as yet no organized Labour Movement in the modern

sense, embracing the mass of wage-earners throughout the country and fostering a community of policy between workers in different trades While the workshop remained the unit of production, the day-to-day contacts of workers in industry were trivial by comparison with the social intimacies of factory life. That the rapid expansion of the factory system at the end of the eighteenth century should have generated a rapid extension of trade unionism was therefore inevitable.

At first, the State was not actively hostile to such associations, except when they were deemed to be usurping its ostensible functions, or when harassed masters appealed to it to protect them from the "tyranny" of their workers. The offending union was then dissolved by special Act of Parliament. Towards the end of the century opposition to the new unions grew. Naturally employers objected to them, but perhaps the chief ground for opposition was political. The French Revolution had shaken Europe to its foundations. When the *Terror* increased, the prosperous classes of Britain took alarm. Every meeting of workers was potentially a conspiracy. Public discussion contained the presumptive seeds of revolution. Even Wilberforce, the enlightened advocate of slave emancipation, declared that combination was a general disease of our social system In this setting, Parliament proceeded to pass the Combination Law of 1799. In the following year the Act was amended in detail but associations of workers or employers as such remained outside the law.

Before this general proscription of trade unions, the more intelligent and and more highly skilled craftsmen were actively interested in parliamentary reform. At the end of the eighteenth century parliamentary representation was notoriously corrupt and completely out of touch with the changing condition of the country. The distribution of seats bore little relation to the distribution of population. Towns such as Birmingham, Manchester and Leeds had no representation whatsoever, while decaying boroughs with half a dozen electors sent a member to Westminster. Cornwall had 42 borough members, Yorkshire, and Sussex 26, Scotland 14 and Lancashire 12. Besides the borough members, there were 122 county members, 80 from England, 12 from Wales and 30 from Scotland. They, too, represented a mere fraction of the population. For instance, the county of Midlothian had 96 electors, and the whole of Inverness-shire 32. As early as 1776 Wilkes had pointed out that 5,723 persons elected an effective majority of the House of Commons Town government was also grossly unrepresentative All forms of public administration had become the preserve of an oligarchy (Fig. 52).

As the new industrial centres drew people toward them the anomalies increased. The agitation set on foot by Wilkes bore some fruit. Sinecures and pensions were reduced and the authority of the Crown curtailed, but such minor reforms strengthened the power of the aristocracy without yielding anything to the masses. Meanwhile the American, no less than the French, Revolution had deeply stirred men's minds There were in Britain many who looked with approval on the American system of government; and its advocacy by Thomas Paine roused people, some to enthusiasm, some to bitter hatred, when he returned from America in 1787 to preach the doctrines set forth in the Declaration of Independence. An obvious corollary

of man's natural equality was that all men should have equal representation in Government Two years later the Estates General of France reassembled and compelled Louis XVI to sign the Declaration of the Rights of Man, a document similar in principle to the American manifesto. There was encouragement in plenty to strengthen reformers in the belief that France, with her age-old traditions and social arrangements, would follow peacefully in the footsteps of America. The process proved to be anything but peaceful, and many of its British supporters became, in Macaulay's words, as violent in their denunciations as they had once been extravagant in their hopes. In Britain, Burke, who had advocated a progressive policy towards America, turned the full force of embittered criticism against the French Revolution His *Reflections* published in 1790 prompted Thomas Paine to a characteristic defence entitled *The Rights of Man*. At once a defence of the French Revolution and a programme for reform at home, the *Rights of Man* had a deep and lasting influence For years to come it was a beacon to reformers and a terror to governments.

Already face to face with an economic revolution which was rapidly changing the face of the country, piling up towns and crowding operatives into factories, the working classes were caught up in the polemics of the time As usual, the leaders in the new movement were not the sweated unskilled factory workers, but skilled craftsmen, many of whom were as yet untouched by the methods of power production. Typical of the class was Thomas Hardy, a shoemaker from Falkirk. Along with other radical craftsmen he founded the London Corresponding Society Started in 1791, it drew its members mostly from the ranks of the skilled artisans of the metropolis It quickly became one of the most influential political societies in the whole country and the model of many others Its aims were modest, annual parliaments and universal franchise; but its activities excited the utmost alarm in the authorities. Up and down the country the reform movement aroused enthusiasm alike among the working class and the middle class. The latter had their *Constitutional Information Society* with an annual subscription of four guineas A *Society of the Friends of the People* had as its avowed object to check more radical tendencies now in the ascendant

Manchester, Sheffield and Glasgow became centres of agitation. In Birmingham the Tory element, which had wrecked Priestley's laboratories in 1791, succeeded in crushing the movement. North of the Border the reform movement was also lively. The Scottish schools had produced a literate public. Cottar and weaver could read Paine's *Rights of Man*; and an increasing number of newspapers and periodicals fanned the flame of reform. On July 26, 1792, the first Scottish *Society of the Friends of the People* was founded in Edinburgh, soon to be followed by similar societies in Dundee, Perth, Glasgow, Paisley and Kilmarnock. Unlike the London counterpart, largely a middle-class body, the Scottish societies had low subscriptions and attracted weavers, shoemakers, tradesmen, and shopkeepers. Greatly daring, they called a Convention in Edinburgh, representing eighty societies It met in December 1792. At its close a delegate proposed that "all should take the French oath to live or die." Members rose as one man, and took the oath with right hands raised "amid reiterated plaudits "

The interest thus displayed by the artisans and tradesmen class marks the beginning of a consciousness of political destiny. Indeed, as Cole points out, a labour movement was born in the trade union and reform clubs. But the prosperous middle and upper classes did not view with complacency a partnership of the working class in politics. They were horrified. Taking advantage of their panic, inspired by excesses of the French Revolution, the government proceeded to strike a crushing blow at all reform. Thomas Muir, a young Scottish advocate who had played a prominent part in the first Edinburgh Convention, was arrested on his return from France and brought before the notorious Lord Braxfield, Lord Justice Clerk, on a charge of treason. With such a judge sitting and a packed jury, the verdict was a foregone conclusion

"What has been my crime?" declared Muir in his eloquent speech. "Not lending a relation a copy of Mr. Paine's works; not the giving away to another a few copies of an innocent and constitutional publication, but for having dared to be, according to the measure of my feeble abilities, a strenuous and active advocate for an equal representation of the people in the House of the People" (Meikle, *Scotland and the French Revolution*, 1912, 134).

In addressing the jury Braxfield made clear his own views:

"I leave it for you to judge," he said, "whether it was perfectly innocent or not in Mr. Muir, at such a time, to go about among ignorant country people, and among the lower classes of people, making them leave off their work, and inducing them to believe that a reform was absolutely necessary to preserve their safety and their liberty, which, had it not been for him, they would never have suspected to have been in danger. . . . A government in every country should be just like a corporation; and, in this country, it is made up of the landed interest, which alone has a right to be represented As for the rabble, who have nothing but personal property, what hold has the nation on them? What security for the payment of their taxes? They may pack up all their property on their backs, and leave the country in the twinkling of an eye. But landed property cannot be removed."

Muir was found guilty and sentenced to fourteen years' transportation to Botany Bay. Next month Palmer, another reformer, was sentenced at Perth to seven years' transportation.

Meantime a second Edinburgh Convention was in session The authorities promptly arrested several members, including two London delegates, Joseph Gerrald and Maurice Margarot. After a trial before Braxfield they too were sentenced to fourteen years' transportation. Such brutal verdicts merely served to stimulate the movement in Scotland. In England there were also similar arrests, including that of Thomas Hardy, the founder of the London Corresponding Society. After a dramatic trial he was found not guilty, and one might have expected that such a victory would have strengthened the reform movement This did not prove to be so. Everywhere there were now signs of decline In face of the growing unpopularity of France and the determined attitude of the government, the reform societies melted away. In 1794 the Habeas Corpus Act was suspended and the following year witnessed the passage of the first of a series of Acts which

temporarily crushed the movement. A Mutiny at the Nore provided the pretext for further repressive legislation, and in 1799, the year of the first Combination Law, another Act suppressed the *Corresponding Societies.* Thus the century ended in a triumph for reaction. The reform movement, bringing together all the most enlightened elements both in the working and in the middle classes expired, and any form of working-class association was suspected of revolutionary aspirations. None the less, workers still met to discuss their common lot openly or secretly, and many a one, among those who could read, still read his *Rights of Man.*

REACTION AND DEPRESSION

By the Combination Laws of 1799 and 1800 any worker who attempted to form a trade union or even attended a meeting to discuss wages and hours could be sent to prison for three months Nor was this all. Under the Common Law, trade union action of any kind was a criminal conspiracy making those involved liable to imprisonment for several years. Ostensibly, the law applied to employers. In fact it did not operate against their interests. Many cases of prosecution of workers have come to light, but none of employers. Moreover, the following letter shows how easily employers could act informally though very effectively. It is from one Scots coal-owner to another, the date being July 14, 1809.

"What kind of terms have you been on with the folks here about employing each others men, has there been an understanding, if so do you wish it continued; or not, do you wish it to be understood that we should not employ each others men although they may be free or even have a line to that effect unless that line carried a recommendation from the one Company to the other to employ the bearer? This would most effectually prevent the men taking advantage of our situation, and they would not so easily leave the one work if there was a difficulty in obtaining work at the other. Pray say what you think of this and I will take the earliest opportunity of waiting on you to have this understood

"All the coal masters about Glasgow and in Ayrshire have lowered the price of colliers' wages. I have only been hinting such a thing here. . . .

"I am certain we ought to cheapen the price of coal working and make them do more work, and we cannot win unless we agree"

For a quarter of a century the Combination Laws remained on the Statute Book. Despite this, a few trade unions, mostly in the old trades hardly touched by the factory system, carried on an open existence. Such unions of skilled craftsmen were generally moderate in aims and methods. So long as they remained more or less quiescent, employers therefore found it convenient to negotiate with them on trade matters In the new factory industries, however, prosecution for conspiracy at common law or under the Combination Laws was general. Those that survived did so in secrecy, holding their meetings at night and burying their records in the ground To ensure secrecy they therefore enforced elaborate oaths on their members. There was always some doubt about whether the Combination Laws applied in Scotland. They made no reference to the country, nor were they specifically

designed to suit legal institutions very different from those of the English. Nevertheless, combinations to raise wages or check reductions were suppressed in various ways before 1799, as, for instance, by the Incorporated Trades or the town councils acting on their behalf In the early part of the nineteenth century, the Common Law was so modified by Scottish judges as to make trade unions illegal.* The most famous case was that of the Scottish weavers, prosecuted in 1812 for engaging in a strike designed to compel the employers to pay the legal wages fixed by the magistrates under the Stuart Act of 1617, the Scottish counterpart of the English Statute of Apprentices of 1563. The whole strike committee was arrested and the leaders sent to prison for terms varying from four to eighteen months. In the following year Parliament repealed the statutes giving justices power to fix wages.

The end of the Napoleonic Wars brought no relief to the workers Instead of the good times they had expected, there was unemployment and depression, the hated Corn Law and dear bread. Disillusioned and disappointed, they eagerly listened to the appeal of the political radicals. William Cobbett started a *Weekly Address to Journeymen and Labourers* at 2d a number. This had amazing popularity. Determined to nip the movement in the bud, the Government adopted a repressive policy. Following the Spa Fields Riots the Habeas Corpus Act was suspended. Measures against Corresponding Societies were reinforced. *Agents provocateurs*, headed by the notorious Oliver the Spy, were sent out to find or manufacture evidence of insurrection. There were many arrests When a great radical meeting in Manchester was broken up by the military, eleven people were killed and many hundreds wounded In spite of public outcry against this outrage, the Government congratulated the officer in charge and passed more panic legislation, known as the *Six Acts* In effect, these prohibited all political meetings, increased the tax on newspapers, and in other ways suppressed attempts to propagate doctrines of reform. Of the famous episode at Peterloo, Carlyle said in 1843,

"The number of the slain and maimed is very countable, but the treasury of rage, burning hidden or visible in all hearts ever since is of unknown extent." (*Past and Present.*) (Fig 53)

By the twenties panic had subsided and there were now signs of trade revival Through astute wire-pulling by Francis Place, a Charing Cross tailor, and Joseph Hume, a radical M.P., the Combination Laws were repealed in 1824 This was a great working-class victory. Trade unions, free at length from statutory and common law restrictions, could operate openly. Many individuals, like Place, who helped to secure this outstanding victory, believed that removal of the restrictions would also remove the inclination to combine. So trade unions would disappear "All will be as orderly as even a Quaker would desire," said Place Events proved him to be wrong Great trade union activity and numerous strikes and lockouts followed repeal Employers and Parliament took alarm. In 1825 there was an amending Act, withdrawing immunity from prosecution under the Common Law

* See "The Law of Combination in Scotland," by J L. Gray, *Economica*, December 1928.

doctrine of conspiracy. It also defined two new offences—molestation and obstruction. Trade unions could still be formed, but if they resorted to the strike they were liable to prosecution as conspiracies and for molesting or obstructing the employer in his business

Despite these legal disabilities many trade unions were organized, some of them planned at the start on national lines. Such were the Steam Engine Makers (1824), the Journeymen Steam Engine Makers (1826) and the Friendly Society of Carpenters and Joiners of Great Britain. The high hopes aroused were unfortunately dashed to the ground when 1825 ended in financial panic and widespread commercial distress. For the next four years, with ups and downs, unemployment was rife, and the evident futility of sectional disputes in such circumstances led the workers to rally once more to the reform movement.

The growth of industrialism was now creating an economically powerful middle class ill-disposed to acquiesce in a political system dominated by the landed interest. It complained bitterly that the aristocracy governed the country in its own interest. For example, the Corn Laws put money into the pockets of the landlords at the expense of industry, while manufacturing costs were kept high by heavy taxation Political institutions were now grotesquely out of gear with the economic framework. After the Napoleonic War it therefore seemed that capitalist interests would throw in their lot with radical politicians and the working class, to the equal disadvantage of the aristocracy and the two traditional parties Some of the leaders of politics favoured buying off opposition by more attention to the needs of industry and new forms of commercial enterprise. Accordingly, Huskisson played a leading part in removing import and export duties and in freeing commerce from the old Navigation Act restrictions Others were prepared to consider political reforms sufficient to ally the middle class to the aristocracy. As it happened, concessions to capitalist interests simply strengthened the case for change, and as the twenties moved to their close the movement, supported by the working classes, gathered momentum.

In 1830 the Birmingham Political Union, including in its membership many working-class members, was founded. It was the forerunner of similar unions in other towns Disrupted by the Catholic Emancipation Act of 1829 the Tory government fell. While France and Belgium were carrying through successful revolutions in the following year, a Whig government returned to power Fanned by unemployment and trade depression at home, as by revolution abroad, the demand for reform of government became insistent and irresistible The Whigs produced a bill sweeping away the system of rotten boroughs, redistributing seats in accordance with population and extending the franchise to practically all the middle class. Great excitement followed the course of the bill It met with defeat in the Commons, but was reintroduced after a general election, to be defeated in the Lords. After a change of ministry the bill finally became law in 1832 "Ten-Pound Householders" in the boroughs and "Forty-Shilling Freeholders" in the counties and tenant farmres who paid £50 or more a year in rent received the vote. But the mass of the people still remained unenfranchised. Five out of every six male adults were still without a vote

ROBERT OWEN AND THE TRADE UNIONS

Having secured the franchise in 1832, the middle class dropped out of the movement for reform, leaving a working class disappointed and disillusioned in its isolation. For two or three years Britain was nearer revolution than it has ever since been Inevitably criticism would sooner or later be directed against an economic system which prided itself on its ever-increasing productive capacity, while permitting widespread poverty and unemployment. Inescapably one asked, who was benefiting from the tremendous acquisition of wealth resulting from the industrial revolution? William Thompson, John Gray and Thomas Hodgskin built on Ricardo's theory that labour is the source of value, dividing economic society into two groups—a capitalist class, the exploiters, and labour, the exploited. Such theories anticipate something of what Marx had to say, but at the time had little influence on working-class aspirations A man who had the widest and most practical influence on the working class at this time was Robert Owen.

Owen had purchased the New Lanark Cotton Mills from his father-in-law in 1799. Alert to the possibilities of power-driven machinery, he made his mills a model of large-scale production Unlike others of his kind, he realized that the human material he employed was just as valuable as inanimate machinery, and devoted boundless energy to giving his workpeople good conditions He asserted passionately that men's characters are moulded by their environment. By his own practice he was able to show that success in business is at least compatible with decent working conditions. Accordingly, his factory soon became famous; and people from far afield came to see for themselves how a well-run business could profitably provide reasonable working conditions, decent houses, educational facilities, and village life for its employees. During this stage of his career, Owen's achievements evoked widespread admiration and respect. When the end of the War came, plunging the country into unemployment and depression, he became more critical of an economic system which tolerated such chaotic conditions, and urged the Government to undertake a New Deal policy of public works for the unemployed and statutory improvement of living standards To this end he pressed Pitt to pass a factory law. A bill eventually reached the Statute Book, first of its kind; but it was a mere shadow of what Owen had proposed. Invited by the County of Lanark to advise them on unemployment, he produced a report in 1820. This noteworthy document contains a novel statement of his views on co-operative communities and a devastating criticism of the existing economic order (Figs. 54 and 55)

While others were obsessed with the claims of political reform, Owen concentrated his interest on economic reform. More than any of the early parents of socialism and co-operation he offered truly constructive plans far ahead of the notions of his time. His critique of competition and the profit motive as the regulator of production is more incisive than that of predecessors or contemporaries. He first appealed to the governing class, but with little success. Naturally his drastic proposals did not attract them. With the moral assurance which is the hallmark of our Puritan heritage, he then set off to America, where at New Harmony he established a model co-

*

operative community. Later on, he established others in his Homeland—at Orbiston in Lanarkshire, at Rahaline in Ireland, and at Queenwood in Hampshire. None of these achieved lasting success, but the challenge of co-operation as a practical alternative to competition had in it the explosive power of a delayed-action bomb, and the prosperous classes heard the whine of its descent. Factory operatives, who hated the conditions of discipline and power production, and the older type of skilled craftsman, who saw his trade threatened by the factory system, rallied to the gospel of Owen, and societies for propagating the doctrine of co-operation, for applying it to industrial production and for organizing distribution on a co-operative basis came into being.

The impact of Owen's ideas on the new trade unions was dramatic It inspired the hope of building up industrial unions of nation-wide scope with the eventual aim of taking over the actual running of industry itself. In the development of the syndicalist idea the Operative Builders' Union which came into prominence in 1832 played the leading role It enlisted members throughout the length and breadth of the country, and set as its object not merely bargaining about wages and conditions but assuming the direct control of the industry. The cotton spinners formed another union with similar aims. At the right moment these vast national unions were to dispossess the employers and run the business as a co-operative concern. Most famous of them all was the Grand National Consolidated Trades Union In its short career it enrolled a million members, drawn from all sorts of occupations

During the years 1829–34 there was intense activity in the trade union world. The country seemed to be on the verge of revolution, but the trade unions were too unwieldy and loosely organized, so they were easily broken. Employers dealt them a severe blow by recourse to a new device, the "document," an undertaking to repudiate trade unionism signed by an employee as a condition of his employment. Disruption of trade unionism was completed by prosecution of the Dorchester Labourers in 1834 At this time it was the common practice of unions to impose oaths of secrecy on their members This practice, prohibited by an unrepealed act of 1797, was a legacy of the days when all trade unions were regarded as criminal conspiracies. The agricultural labourers of Tolpuddle in Dorsetshire, who had formed a branch of the Grand National, followed this usual trade union custom They were prosecuted. The savage sentence of seven years' transportation had a shattering effect Before the end of the year the Grand National and the Builders' Union had disappeared. The aspirations of the British working class found a new focus in the Chartist movement

CHARTISM

Chartism was itself a gigantic protest against the social conditions under which the mass of the people lived and worked. Its causes lay deep in the social structure of the country—unemployment, low wages, long hours and wretched urban conditions. The programme of the Chartists was a moderate and sensible political programme which had no hope of acceptance from

the House of Commons. The great trade union schemes had collapsed in the early thirties amidst prosecution and persecution. The reformed House of Commons passed a factory law in 1833. It introduced sound innovations, notably the appointment of factory inspectors; but it did not go far to meet the demands of the factory operatives. Disappointed and bitter against the reformed Parliament, the working population of Yorkshire and Lancashire persisted in agitation for further concessions The cry was now for a ten-hour day.

Then came the hated Poor Law of 1834. Down to this time, poor relief had been given on a family sliding-scale basis. The new Act made entry into the Dickensian workhouse a condition of relief of the able-bodied. The poor law issue thus came to a head as trade union agitation went into a decline. Bad trade caused widespread unemployment in 1836 Up and down the country the working class was disillusioned, disappointed and bitter. A group of London radicals met and founded the London Workingmen's Association. William Lovett was appointed secretary. In 1837 they drew up the Petition which contained six famous points—universal male suffrage, vote by ballot, equal electoral areas, abolition of the property qualification for members of Parliament, payment of members and annual parliaments. They set out on a campaign throughout the country for support, and speedily found that their programme provided a rallying-point for the tremendous mass of discontent which existed in the country. Soon more than a hundred societies were formed in other parts of the Kingdom. The stimulus of trade depression revived the Birmingham Political Union, under the leadership of Thomas Attwood, a local banker and member of parliament. Attwood advocated the abolition of the gold standard and the establishment of a paper currency to be regulated according to the state of trade. In 1837 the union adopted a programme of parliamentary reform. This brought it into line with the London Workingmen's Association. Throughout the country there was widespread enthusiasm, when Lovett issued the Six Points in the form of a draft bill called the People's Charter, it knew no bounds. The chartist movement was formally launched at a gigantic meeting at Newhall Hill, Birmingham.

"For the next three years," says Hovell (*The Chartist Movement*, Manchester, 1918, 107), "the forces of working-class discontent, of popular aspirations and enthusiasms were concentrated as they had never been concentrated before under the standards of the National Petition and the People's Charter."

A plan was adopted to hold a Convention of the Industrious Classes. Huge meetings were held all over the country to elect delegates. The Convention met in London on February 4, 1839. The movement thus set afoot was too vast to be controlled by either of the bodies which had equipped it with a programme. Moderate leaders took a back place Henceforth the stage was held by fiery revolutionaries like Feargus O'Connor and Joseph Stephens. The first convention in London dissipated time over discussions on the merits of physical and moral force as an instrument for achieving a programme which united its supporters by nothing more substantial than a

common sentiment of discontent. There was no agreement about methods to be adopted for remedying their grievances. Some like Lovett hoped a free franchise would inevitably force Parliament to implement the economic and social regeneration of society. Others, like O'Connor, believed that political power could be secured by force alone. By May 7th the Convention had completed the first part of its work by handing over to Attwood the Great Petition, containing, it was said, 1,200,000 signatures. Thereafter the Convention withdrew to Birmingham.

Meantime a considerable change had taken place in Birmingham. Alarmed at the dominating influence of those who advocated physical force, the moderate element began to withdraw. When the Convention reached Birmingham a cold reception awaited it By order of the magistrates the use of the Bull Ring was refused. The Chartists defied the magistrates' order. When London police were drafted in to maintain order, the situation became ugly Knowing that their petition would be rejected by the House of Commons, the Chartists were already making plans to use force. It was proposed to hold a Sacred Month, during which chartists would deal only with chartists' shops and would close their accounts with the banks The inevitable occurred on July 12, 1839, when the Commons rejected the Petition by 235 votes to 46. The Government had taken elaborate precautions against insurrection. The police carried out wholesale arrests, and the movement went into decline. The "hungry forties" brought a revival, and a Second Convention was held in London in the depths of the depression during 1842. Once again the petition was presented, once again rejected. Thereafter the movement disintegrated rapidly. There was a final rally in 1848, when trade was very depressed It came to nothing. As an active movement, Chartism was dead.

From the start, the movement had little chance of success. At a time when industrial capital was going from strength to strength, when production was mounting steeply, with imports and exports increasing at a pace that astonished the world, it is inconceivable that a middle class, now safely in the government saddle, would be disposed to make political concessions to the workers. Chartism had grown out of depression and bad conditions. Improved trade in the later forties, and successive minor concessions to social reformers, such as the Mines Act (1842), the Factory Act (1844), the Ten Hours Act (1847), and finally the repeal of the unpopular Corn Laws, sufficed to assuage the discontent which had supported the demand for drastic political changes.

THE NEW INDUSTRIAL ORDER

By the middle of the century the workers had become acclimatized to capitalism Thus a characteristic of the forty years period between 1845 and 1885 is the efforts of the skilled workers to consolidate their position within the new industrial order. There is little or no talk of co-operative community life, of socialism or of revolutionary methods A new alignment was taking shape Liberalism and Labour had come to terms. The aristocracy of Labour was now indoctrinated with self-help, with the virtues of abstinence, in

THE ENGLISH
HOVSE-WIFE,

Containing the inward and outward Vertues which ought to be in a compleate Woman.

As her skill in Physick, Surgery, Cookery, Extraction of Oyles, Banquetting stuffe, Ordering of great Feasts, Preserving of all sorts of Wines, Conceited Secrets, Distilations, Perfumes, ordering of Wooll, Hempe, Flax, making Cloth, and Dying the knowledge of Dayries, Office of Malting, of Oates, their excellent uses in a Family, of Brewing, Baking, and all other things belonging to an Houshold

A Worke generally approved, and now the fifth time much augmented, purged and made most profitable and necessary for all men, and the generall good of this Kingdome

By G M.



LONDON,
Printed by *Anne Griffin* for *Iohn Harrison*, at the Golden Vnicorne in Pater noster-row. 1637

FIG 56. THE ENGLISH HOUSE-WIFE, 1637
(*Phillips & Tomkinson*, English Women in Life and Letters, *by permission of the Clarendon Press, Oxford*)

This advertisement, printed in 1637, indicates the wide range of skill demanded of the competent housewife The home was a workshop where cooking and baking, spinning and weaving, brewing and dyeing were part of the day's routine When the industrial revolution brought many of these occupations within the framework of power production, the factory claimed women employees for just those occupations which had been carried on for centuries in the home

(See p 316)



FIG 57 LACE-MAKING

(*Knight*, Cyclopaedia of the Industry of All Nations, 1851)

Knight, from whose book this illustration is taken, was anxious to show the value of industry This picture of women working at home does not portray the harsh conditions under which they laboured Lace-making, like tailoring or glove-making, was indeed a sweated occupation Pay was for piece work Hours were long and working conditions wretched in the extreme It was of such that Thomas Hood wrote *The Song of the Shirt*

(See p 323)

(49)



XXII.

Look at your Copy.

When Frances goes to school, to write,
I find, with great concern,
She never takes the least delight
To really strive to learn.

D *

FIG 58 THE WRITING LESSON.
(*Turner*, The Cowslip, 1811)

In the eighteenth and nineteenth centuries, teaching was the last refuge of the genteel woman who had failed to find a husband It was a hard, dull, uninspiring occupation, as this illustration shows, but, though badly paid, it was regarded as a genteel vocation

(See p 325)



FIG. 59 FASHIONABLE DRESS, 1868
(*By permission of the* Illustrated London News.)

Elaborate dress, portrayed in this illustration, reflects the place occupied in society by middle and upper class women in the mid-nineteenth century. Men were the pillars of society, women its ornaments. Secure from the rough and tumble of economic affairs, they could lead a life of idleness, devoting some of their leisure to the acquisition of accomplishments likely to enhance their value in the marriage market. Such was the role against which such women of character and spirit as Florence Nightingale revolted.

(See p. 327)



FIG 60 THE FEMALE SCHOOL OF ART, QUEEN'S SQUARE THE LIFE CLASS, *1868*

(*By permission of the* Illustrated London News)

At the time this school declared itself to be "the only one devoted exclusively to female education in art and deserves a visit from those interested in the advancement of *art-education amongst women*" Upwards of *120* students were on the books, we are told, and as many as 150 could be accommodated

(*See p 331*)



FIG 61 A YOUNG LADIES' COOKERY SCHOOL, 1880.

(*By permission of the* Illustrated London News)

Though it was not proposed that "young ladies" should actually turn their hands to cooking, some knowledge of the art would be of value to the married woman who would otherwise be at the mercy of her cook The Press comment states "the social dignity and artistic elegance, as well as the intellectual and scientific character of this female occupation, which has always been esteemed for its practical utility, will henceforth become more generally acknowledged "

(See p 334)



FIG 62. LADY CRICKETERS, 1889.

(*By permission of the* Illustrated London News)

By 1889 women had gained notable improvements of legal status and of educational opportunity Here they are challenging masculine exclusiveness in outdoor sport, still handicapped by the prevailing style of feminine attire

(See p 336)

Departures and Arrivals of the different Stage-Coaches.

L O N D O N.

A Diligence fets off from James Buchanan's, Saracen's Head-Inn, upon Sundays, Tuefdays, and Thurfdays, at 12 o'clock at night—Arrives up on Saturdays, Mondays, and Wednefdays, at 9 o'clock at night

E D I N B U R G H.

A Diligence departs from James Buchanan's, Saracen's Head-Inn, at 9 o'clock morning—Arrives the fame afternoon about 3 o'clock

A Coach goes by Falkirk and Linlithgow, from Thomas Dune's Black Bull-Inn, Argyle's-ftreet, every lawful day, at 8 o'clock morning—Arrives the fame afternoon, about 5 o'clock

Alfo a Coach fets out by way of Holy-Town, from the faid Inn, every lawful day, at 8 o'clock morning—Arrives the fame afternoon, about 4 o'clock

A Fly departs from Andrew Dunbar's, King's-Arms, every lawful day, at 8 o'clock, morning—And Arrives the fame afternoon, betwixt 4 and 5 o'clock

A Coach departs from John Porteous, at the fign of the Leaping-horfe, fouth fide Trongate, at 8 o'clock morning—Arrives the fame afternoon, betwixt 4 and 5 o'clock

Alfo a Coach from the Crown-Inn, Gallowgate, at 8 o'clock, morning—Arrives about 4 o'clock the fame afternoon

FIG 63 A STAGE COACH TIMETABLE

(*Glasgow Directory*, 1787)

In the generation before Waterloo, the stage coach, based on the new turnpike roads, was still a novel form of transport According to the standards of the time, it was a speedy form of travel, supplemented on the canals by the "fly-boat"

(See p 346)

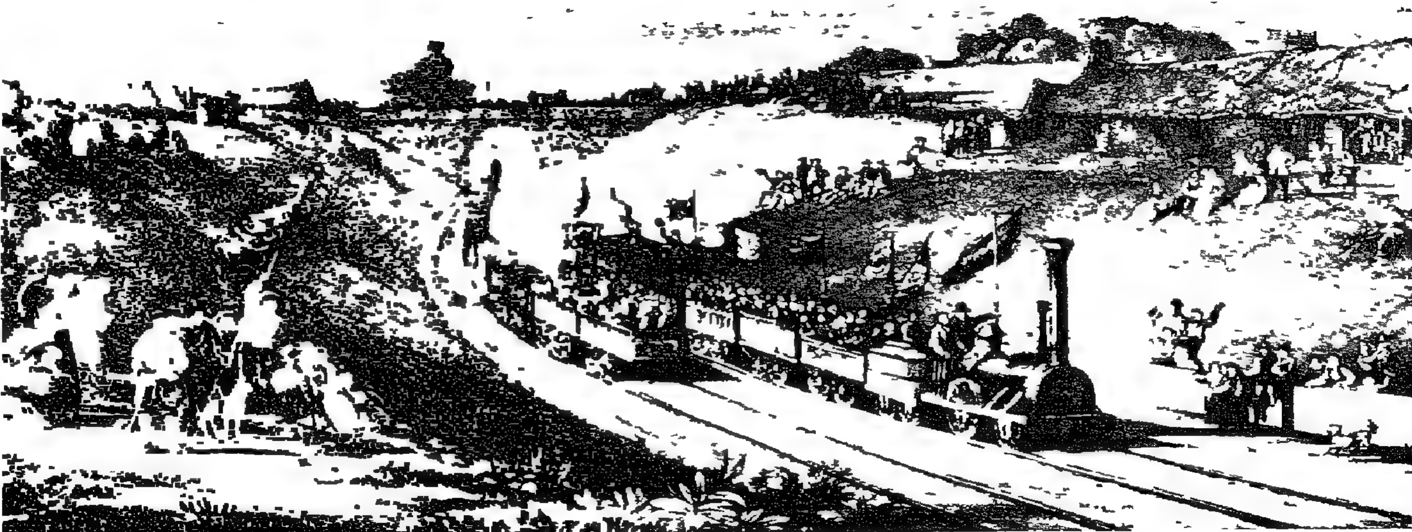


FIG 64 OPENING OF THE GLASGOW AND GARNKIRK RAILWAY, 1831

(By permission of Jackson, Son & Co)

(See p 347)

though there must have been scores of shopkeepers, drapers, importers, corn dealers and other business people who combined bill-discounting with their ordinary business, and some no doubt issued their own notes.*

The industrial revolution created conditions favourable to the development of country banking Commercialization of farming made necessary provision of banking facilities in the important agricultural areas. Deposit banking developed as farmers paid their surplus funds after harvest, while the practice of discounting bills grew as farmers sought credit in spring-time when out-payments were large. Development of the factory system and rapid growth of town life also called for banking facilities on the spot. In the industrial areas, such as the Midlands, Yorkshire and Lancashire, the bill of exchange was in common use, and passed from hand to hand by endorsement. "These bills," says Feaveryear, "formed the only paper currency of the West Riding and Lancashire, for no country bank notes circulated in those parts." According to an estimate given before the Bullion Committee of 1810, there were 230 country banks in 1797, over 600 in 1808, and 720 in 1810. Many of them grew out of ordinary business. Thus the corn dealer might add bill-discounting to his business, and eventually became a country banker. The "Old Gloucester Bank" originated in the business of James Wood, chandler. Lloyds Bank can trace its beginnings to Samson Lloyd, a Birmingham ironmaster, and his partner John Taylor, maker of buttons and snuff boxes.

SCOTTISH BANKING

In some respects the history of Scottish banking resembles that of England. With respect to others, it is fundamentally different In its early stages, the goldsmiths played a leading role in Edinburgh, as they did in London. Moreover, the bill of exchange was used extensively in the settlements of internal trade. Generally, however, Scottish banking proceeded on different lines from banking in England. The first bank was the Bank of Scotland, founded in 1695. Like most chartered bodies of the time, it got a monopoly, but it was limited to twenty-one years, and when the period expired there was no request for renewal The way was thus clear for the founding of other joint stock banks, with the right to issue notes and carry on banking business Steps were soon taken to establish another bank The outcome was the founding of the Royal Bank of Scotland in 1727. For a time these two important banking companies were keen rivals, and on one occasion the Bank of Scotland was compelled to close its doors (Fig 44).

A feature of Scottish banking has been the close relations that have subsisted between the banks and industry The Royal Bank started this profitable alliance when it instituted the cash credit system, whereby a client of good repute could obtain an advance on the security of two names. He could draw against the advance when he was in need of funds, and when his financial position was strong he could pay in to reduce the debt standing against his name. The system was of great benefit to small men. Closely allied to this development was the deposit system started by the Bank of

* See "Money, Finance and Banking," by A. V Judges, in *European Civilization*, 1937, 477.

Scotland in 1730. To these two features of Scottish banking one must add a third, branch banking, which owes its extension to the British Linen Company, founded in 1746. It originally began as a mercantile and financial concern connected with the linen industry, but soon confined its activities to banking alone. From its inception it established branches in many parts of Scotland, thus taking banking facilities, hitherto concentrated in Edinburgh, into the towns and villages of the remote countryside.

As was natural, however, such towns as Glasgow, Aberdeen, and Dundee would not be satisfied indefinitely with mere branches In Glasgow, flour and sugar merchants, following the lead of merchants in Edinburgh, had already added banking to their business before 1749, when Aberdeen took the initiative of founding the first complete bank, the Aberdeen Banking Company, outside the capital. In the following year the Glasgow merchants founded the Ship Bank, and shortly afterwards, the Arms Bank. The old chartered banks in Edinburgh viewed the development with alarm, and took immediate steps to crush them "It is proposed," says a secret document drawn up by the two banks in 1752, "that a mutual friendship and harmony be cultivated, thereby to support, maintain and defend each of them their own and the other's interest against all attacks that may be made by the other Societies that pretend to carry on the business of Banking in other parts of Scotland other than Edinburgh, without lawful authority" (Munro, *Royal Bank of Scotland*, 117–19). The method of warfare was simple. It was to collect as large a quantity as possible of a rival's notes and to present them for payment, with the object of exhausting cash reserves. Through the use of this trick the Aberdeen Banking Company had to close its doors. The Glasgow banks proved more stubborn. By the adoption of legitimate, yet troublesome, tactics, they retained their solvency. Writing of the Glasgow Arms Bank, Rait says:*

"not only was payment made in sixpences but the Teller proved himself an adept in obstructive tactics, miscounting the money and counting it over again 'from one hand to the other, sometimes letting fall a sixpence for a pretence to begin anew.' Time was also occupied in sounding a coin to see if it rang true and in discussions about an odd size or shape . . . and, on occasion, the Teller would be summoned to attend to urgent business and the porter ordered to take his place and to 'blunder with great alacrity'."

The victory of the Glasgow banks stimulated the founding of similar local banks. Since there was no restriction on their operations or on their size, all of them issued notes, discounted bills, and carried on the cash credit system, and established branches in their own district, and almost all were joint stock companies with transferable shares, though not with corporate privileges. Generally they adopted a semi-public designation, such as the Banking Company of Dundee (1763), the Banking Company of Aberdeen (1767), the Banking Company of Stirling (1777), the Banking Company of Greenock (1785), and so on By 1800 Scotland had three large chartered banks with headquarters in Edinburgh, as well as numerous local banking companies with branches in their own areas.

* *The History of the Union Bank of Scotland*, 1930, 29–31

THE GROWTH OF CENTRAL BANKING

To-day the Bank of England occupies a very special place in our banking system. It is "the Central Bank." This unique position has come about through the operation of measures extending over more than a hundred years. From its beginning the Bank was privileged beyond all others in England. Until 1826 it was the only joint stock bank, and in fact, though not in law, it was the only note-issuing bank in London. As banking in London and the provinces extended, the position of the Bank of England got stronger It was the obvious institution through which other banks could settle their debts with one another.

Being a great mercantile city, a great port, and a great distributing centre, London naturally attracted the attention of Scots as well as of provincials. Before 1800 the Scottish banks had established a clearing system for notes in Edinburgh, and settlement was made by means of drafts in London. In England, because of the ready negotiability of the bill on London, all the provincial banks came to have agents there on whom they might draw and from whom they might obtain supplies of specie when necessary. Because of the privileges conferred on it by charter, as well as by the prestige attached to being the Government's banker, the Bank of England stood higher in the financial hierarchy than any other bank. Confining its business largely to Government and the chartered companies, such as the East India Company, it left ordinary commercial business to the non-issuing London banks It became the custom of the non-issuing London banks to keep their reserves in Bank of England notes, which, in effect, constituted the chief currency of London.

The metropolis thus became the centre of a financial web whose strands stretched over the entire country Here were the makings of a unified banking system, whose essence is centralization of the cash reserves of the country in London. If any country bankers experienced excessive business involving the discounting of bills in their own notes, or perhaps of paying their notes in cash, they drew on their reserves in London, and in turn the London bankers drew their reserves at the Bank of England. It only awaited the development of the current and deposit cheque system and the centralization of the note issue to complete the process of making the Bank of England the corner-stone of the banking system (Fig 45).

Cheques had been used to a small extent by the London goldsmiths Unlike bank notes, they could be drawn for specific sums by individual customers of the banks against their deposits. The system had great advantages, and it is not surprising that it spread in the eighteenth century. The use of the cheque, however, complicated still further the indebtedness of the banks to one another, for in the course of a day a bank might receive cheques drawn on a score of other banks. Sooner or later some system had to be devised to settle payment of cheques. Banks in London, where the system developed first of all, adopted the device of employing one or two "walk-clerks," who went round from one bank to another collecting cheques. Perhaps one clerk, brighter than the others, hit on the plan of fixing on a common meeting-place where they could exchange cheques and settle any

balance. In 1770 the London Walk Clerks made a public-house in Lombard Street their rendezvous.

"Here, in the public room, or, according to tradition, on the posts in the court outside, each day after lunch, a rough system of exchange of cheques was carried on between the clerks from each bank, the balances being settled in notes and cash. This rough system of clearing grew to such an extent that the bankers became alarmed at the large amount of notes involved and rented a room for their clerks to meet and exchange drafts" (quoted C R. Fay, *Great Britain from Adam Smith to the Present Day*, 1928, 107)

From these beginnings arose the Clearing House system. For many years the banks who were members of the Clearing House settled their balances in Bank of England notes. In 1854, by which time the cheque system had become universal, they settled by means of a cheque drawn on the Bank of England. To make this possible, the banks agreed to keep their cash reserves in the form of a deposit at the Bank of England. To facilitate this system the Bank of England itself became a member of the Clearing House in 1864. From the City the practice spread to the London suburban area, and then to the large provincial centres, where cheques were cleared every day. The balance was settled by drafts on the London offices of the banks, which in turn settled their differences by drafts on the Bank of England.

The convenience of having an account with the Bank of England for the settlement of cheques was not the only consideration involved Bankers found it to their advantage to keep the cash reserve in their own tills as small as it was safe to do, depositing the bulk of their cash elsewhere Gradually a one-reserve system was adopted, because it was in the interest of every bank to be able to turn to one institution with large reserves which could be freely drawn on in an emergency The position of the Bank of England as the Central Bank was strengthened after the Bank Act of 1844, designed to give it the monopoly of note issue in England After the war of 1914–18, Bank of England notes became legal tender throughout Britain The Scottish banks, for instance, may keep Bank of England notes instead of gold against their own notes issued in excess of the fiduciary issue. This highly centralized system is of immense importance. It places within the power of the Bank of England control of credit throughout the country (see below, p. 233).

THE BANK CHARTER ACT OF 1844

To-day the note issue of the Bank of England is based on the principles laid down in the Bank Charter Act of 1844. Soon after establishment of the gold standard, controversy raged round two matters. One was the monopoly of joint stock banking by the Bank of England. North of the Border there was no such restriction, and joint stock banks were highly successful Scotland was thus a standing example of the commercial advantages of corporate banking In 1826 England took the first step to fall into line with Scottish practice Joint stock banks were permitted outside the London area. Another Act of 1833 confirmed the monopoly of the Bank of England with respect to note issue in London, but brought to an end its joint stock monopoly.

In the next few years several important banks were formed—the London Joint Stock, the London and County, and the Union of London. But joint stock banking did not develop rapidly while the liability of shareholders was unlimited This hindrance was removed by a series of Acts between 1855 and 1879. Thereafter joint stock banking became general. This facilitated amalgamation.

The other controversy was about the note issue, and this was settled in the Bank Charter Act of 1844. Before this time the Bank of England, joint stock banks outside London, and numerous smaller provincial banks issued their own notes. There was no statutory restriction. The issue of each bank was left to the judgment and prudence of its directors or partners. It is not surprising that bankers often issued more notes than their reserves justified. A run on the banks quickly exhausted cash reserves, and large quantities of notes were left unpaid The Bank Charter Act of 1844 attempted to remedy this state of affairs. It applied to England, and it had two objects. One was to limit the quantity of bank notes circulating on credit, and to ensure that the remainder should be backed by an equivalent amount of coin or bullion. The other was to concentrate monopoly of note issue south of the Border in the hands of the Bank of England

The Bank of England was divided into two departments—the Issue Department, concerned with the issue of notes, and the Banking Department, concerned with ordinary banking business. The Issue Department was permitted to issue notes against first-class securities up to fourteen million pounds, but thereafter every note was required to be backed by an equivalent amount of gold The issue of notes by other banks was limited to an amount determined by their circulation prior to the passing of the Act. Further growth of banks with power to issue was to stop. Any existing note-issuing bank which failed, or amalgamated, or increased its partners beyond six, automatically lost its right to issue notes. As a consequence of this provision, private note-issuing in England came to an end The last bank of this sort was Fox, Fowler & Co. By amalgamating with Lloyds Bank in 1921, it lost its note-issuing rights. Thus the Bank of England was left alone in the field. By this time its fiduciary issue had increased from fourteen to nineteen million pounds, since it was permitted to take two-thirds of any lapsed note-issue. In 1845 the same principle was applied to the Scottish banks There were to be no new banks of issue, and existing banks were to have fixed fiduciary issues, but they might issue more notes provided they were backed by gold In Scotland, however, no individual bank had a privileged position. The result is that all the Scottish banks now issue notes.

On the outbreak of war in 1914, the Treasury started an unrestricted issue of £1 and 10s. notes At the end of the war, the Cunliffe Committee recommended a return to the principle of the 1844 Act. After further inquiry the Currency and Bank Notes Act followed in 1928. The new fiduciary issue was fixed at 260m pounds, after which each note had to be backed by an equal amount of gold The Act of 1844 had been rigid Note-issue could not be increased without an increase in the gold reserve In 1928 there was an attempt to remedy this by giving the Treasury power to assent to an

increase or decrease of the size of the fiduciary issue, subject to two conditions:

(*a*) that such authority should not run for more than six months;

(*b*) that it might be renewed or varied, but not so as to remain in force for more than two years without Parliamentary sanction By permitting the Scots banks to hold Bank of England notes instead of gold, Britain adopted a one-reserve system.

DEPOSIT AND CHEQUE SYSTEM

One of a bank's ostensible jobs is to provide purchasing power to meet the varying requirements of trade. Before mid-Victorian days, the common method was to discount bills or make loans in notes. The scale of trade operations, however, made payment in notes and coin a cumbersome business. The cheque cut out a lot of fuss and bother, because it could be drawn for an exact sum required, and could be paid into an account. The monetary transaction then simply consists of debiting one account and crediting another When the Act of 1844 limited the possibilities of profit through note circulation, the convenience of the cheque became more apparent. Instead of paying a loan to a customer by handing over a bundle of notes, a banker gave him a credit in his books and a cheque-book, with power, in effect, to write his own notes. Everyone is now familiar with the adage that loans make deposits. When Mr. A. gets a loan of £1,000 from his bank, the bank requires security; and its deposits increase as if Mr. A. had actually deposited £1,000. By this device of accountancy, the banks manufacture purchasing-power on which they can charge interest. Although countless people pay their incomes into a bank account, and merely use cheques as a convenient way of settling accounts, the bulk of deposits represent *loans* and not savings.

This system was vastly stimulated by the Act of 1844. More and more the use of coins and notes was restricted to relatively small payments. In the course of time the great mass of transactions came to be settled by cheque, though sometimes firms continued to use inland bills of exchange. The promoters of the Bank Act had not foreseen this development. On the contrary, they believed they were restricting the power of banks to create credit. The deposit and cheque system defied any such restriction. The bank could still manufacture money. Indeed, there were no legal limits to the amount of loans a bank could now grant. In practice, of course, bankers learned what they had learned with bank notes. Some specie must be kept as reserve for those who wish to cash notes or cheques By custom, the proportion between cash reserves and liabilities came to be fixed round about 10 per cent, but there is no statutory limitation. Thus the cheque gradually drew all banks into the same system, and strengthened the growing authority of the Bank of England. The mass of payments thus resolve themselves into bank entries. One person's account is credited, another debited, while the clearing-house system settles balances between the different banks.

THE GOLD STANDARD

The gold standard is a subject of great historical interest and indeed of current political controversy. Since gold has occupied so large a place in the history of mankind it is important to understand how and why people came to put their faith in the metal.

A gold standard means that the unit of currency—the pound sterling, the mark, the dollar or franc—is guaranteed equal in value to a fixed and invariable quantity of gold. This implies that one should be able at any time to convert notes into gold, or *vice versa*, and in any quantity. To fulfil this condition, it is unnecessary that gold coins should circulate. It is sufficient that gold is obtainable on demand and in unlimited quantities. We can therefore have a gold *specie* standard (with gold coins circulating) or a gold *bullion* standard (without gold coins). The former was the system in operation in Britain till the war of 1914–18. The latter was established in 1925, and remained in force until 1931.

Britain took the first step towards establishing a gold standard in 1774. Before this time gold and silver theoretically enjoyed equal claims. Both were minted freely, and coins of either sort were legal tender. When two metals circulate together, the ratio between them tends to be upset by circumstances affecting the supply or demand of either of them Till late in the seventeenth century gold coins served for large payments in home and foreign trade For ordinary purposes the less valuable metal was in common use. About the end of the century the supply of gold expanded, because increased quantities came from Africa. The demand for silver as currency and for export to India mounted steeply. Thus silver appreciated in value as gold depreciated. The Government was forced to act, and in the Coinage Act of 1774 the legal tender of silver was limited to £25. Gold was thus left in a privileged position The final step towards establishing a gold standard was taken in 1816. By the Coinage Act of that year provision was made for the free coinage of gold at the Mint price of £3 17s. 10½d. per ounce Troy, and the legal tender of silver was limited to 40s. In the following year the sovereign weighing 123 grains became the standard coin, replacing the gold guinea which had held that position since its introduction in 1663

After the discovery of gold in Australia and California, European countries followed Britain's example. Those which still had a bimetallic currency found it impossible to keep a steady ratio between gold and silver in face of the tremendous output of gold from the new sources of supply. One by one they abandoned the attempt and established the single gold standard. Germany was first in 1871, followed in the next year by the Scandinavian countries, then by Holland, and later by Austria-Hungary, Russia and France. Across the Atlantic the United States, and in the Far East, Japan, joined the ranks of the gold-using countries China was the only notable nation which retained a silver standard. Over the greater part of the industrial world, the monetary unit (the pound sterling, the franc, the mark, the dollar, the yen, and so on) became legally tied to gold. This was of immense importance, because it provided a common sheet-anchor for all the chief currencies. The legal determination of the gold equivalent of the monetary

unit was not, however, the only condition countries subscribing to the international gold standard had to fulfil. They also had to permit free importation and exportation of gold in unlimited quantities. These were "the rules of the gold standard game." Any attempt of one country to break them upset the system. The attempt to observe them also caused penalties. A country which carried them out to the letter might involve itself in danger of upsetting its own internal economy.

For a time bankers regarded the gold standard as a fool-proof device for regulating the money machine. This simple faith was shaken after the premature and disastrous re-establishment of the gold standard in 1925 The Cunliffe Committee, appointed to advise on the stabilization of currency and banking during the war of 1914–18, paid a glowing tribute to the gold standard of Victorian days With some justice they showed that the gold standard had been largely automatic in pre-war days. There were no means by which legal tender currency could be increased except by the import of gold, and no means of diminishing it except by export of gold If the Bank of England, compelled by law to buy at the price of £3 17s. 9d. per ounce, got more bullion, there was an increase of the note issue This resulted in an expansion of credit, for their cash reserves increased as Bank of England notes passed into the hands of commercial banks The latter could therefore extend credit to their customers. Conversely, if the Bank of England sold gold abroad, the result was diminution of note issue and consequently of credit facilities.

One of the great merits of the international gold standard was the stability of the foreign exchanges, which moved within narrow limits fixed by the cost of transporting gold from one country to another. If a country's imports relative to exports were steadily rising, the exchanges moved against her There was an outflow of gold. Consequently the international gold backing of the paper currency in circulation contracted. Purchasing power was diminished, and prices fell This gave a stimulus to export and a check to imports. Conversely, if exports were soaring ahead of imports, the foreign exchanges would be favourable. Foreigners would find it convenient to pay for goods by sending gold, which would increase purchasing power. So prices would tend to rise, thus checking exports and promoting imports. The movement of gold from one country to another thus encouraged correspondence of price levels in the gold-standard countries. The free trade policy of Britain, which allowed foreigners to pay interest and repay capital in the goods of their own country, helped the system to work smoothly.

It is roughly true to say that there was an automatic machine to adjust the value of purchasing power to world prices in the heyday of the gold standard It is also true that there was grit in the wheels of the machine. The weakness of a gold standard, completely uncontrolled except by the automatic movements of the metal itself, is that it hands over the whole direction of the money machine to mere chance. A drain of gold abroad could check credit and precipitate a financial crisis. Such crises occurred in the years 1825, 1836 and 1847 The discovery of a gold-field would ultimately result in the expansion of note issue, creation of credit, and rising prices At the close of Victoria's reign the flow of gold from the South

African Rand, from the Yukon and from West Australian mines, set in motion an expansion of purchasing power. In Britain prices rose by 35 per cent between 1895 and 1914, in Germany by 42 per cent, in France by 44 per cent, and in Russia by 52 per cent.

Before the war of 1914–18 the automatic working of the gold standard was already debatable. Indeed, the Bank of England was taking steps to "manage" money. Even before this time the Bank of England, as the central bank of Britain, did not permit complete automatism When there was a drain of gold to foreign countries, it raised its bank rate. This had the double effect of encouraging foreigners to leave their gold here and of checking the expansion of credit. Before the war of 1914–18 another trick was tried out. This was the device known as "open market operations," by which the Bank of England has come to exercise control over credit and prices. If it wishes to check expansion of credit, or neutralize effects of the import of gold, it sells securities. The brokers or merchants who buy them have to pay for them. Payment depletes their deposits, and in turn the cash reserves of the banks with which they deal Reduction of a bank's reserves at the central bank in turn compels it to restrict its own advances. In other words the effect of selling securities is to check expansion of credit. Conversely, by buying securities, the Bank of England can increase the reserves of the commercial banks, and so enable them to expand credit. Before the war of 1914–18 Britain was therefore moving towards "a managed currency," and away from the automatic working of the gold standard.

By its tremendous increase of paper money and its interference with foreign trade, the war itself drove one country after another off the gold standard. With the sheet-anchor of gold removed, the forces making for a common level of prices cease to operate. What determined each country's price level independently was its own domestic policy. The wholesale *price index* number, registered as 100 in 1913, had reached the following levels by 1920 (Heaton, 615)

Great Britain	307
France	509
Holland	292
Sweden	359
Italy	624
Germany	1,965

Except when they were artificially pegged, the foreign exchanges fluctuated wildly from the old gold par. The new rates had to express the relation between the purchasing power of the different currencies. While the old gold par of exchange between London and Paris was £1 equal to 25 22 francs, the rate rose in war time to over 130 francs to the pound sterling.

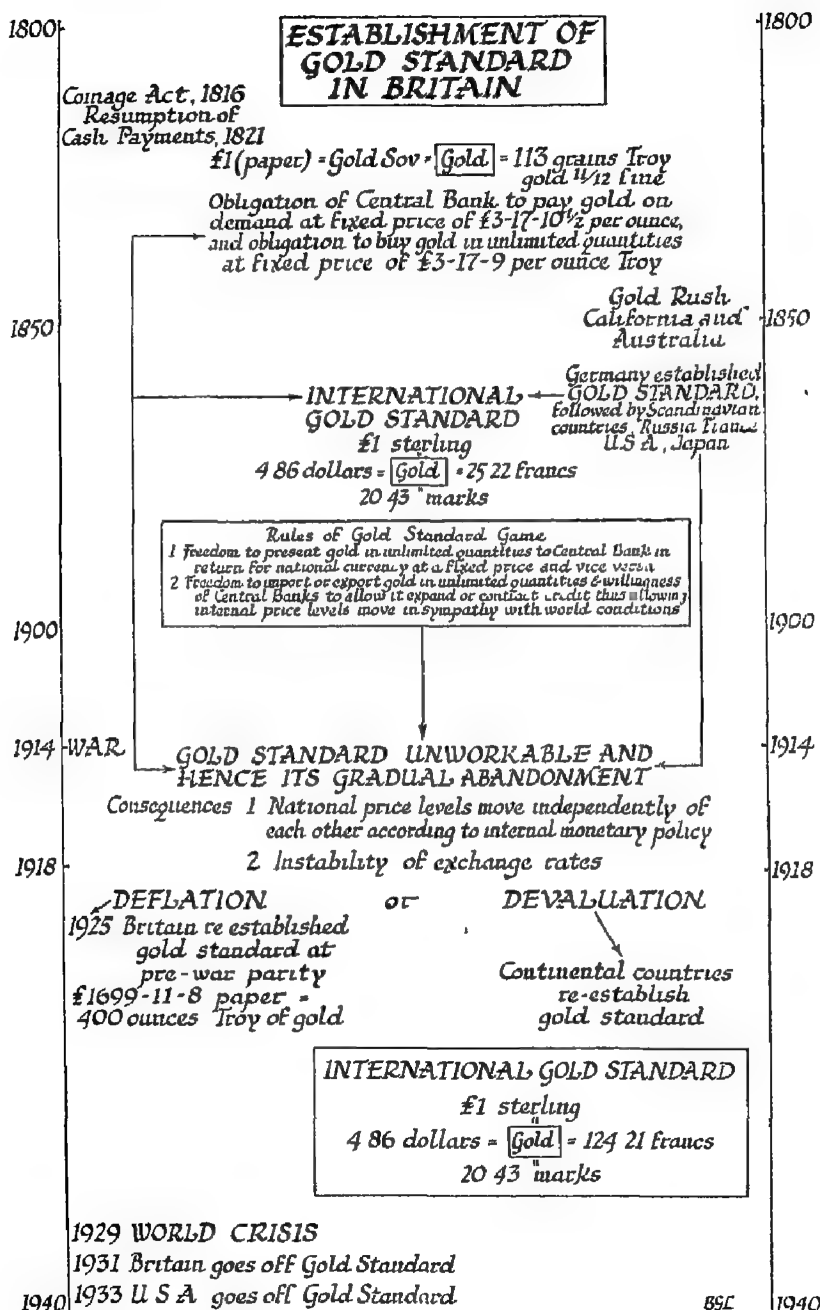
In view of the widespread dislocation of monetary standards caused by war finance, it is not surprising that so many regarded a return to the gold standard of pre-war days as the only sensible procedure. In Britain, the Cunliffe Committee reported unanimously in this sense. The practical problem proved to be extremely complicated, and there were different

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schools of thought about how to re-establish the gold standard. One might struggle painfully to restore the old level by making paper more valuable (*deflation*), and thus establish equality between the gold pound and the paper pound. Or, believing that such a process would be disastrous, one might settle on a new standard (*devaluation*). Belgium, France and Italy adopted the second alternative, but Britain, despite many powerful advocates of devaluation, adopted the first. By a process of deflation, the pound was restored to the old parity, but with disastrous results Prices tumbled, increasing the real burden of the National Debt, benefiting lenders and the *rentier* class, heavily penalizing the working class, and bringing unemployment in its train. Since costs (wages, raw materials, etc.) did not fall so quickly as prices, industries dependent on foreign markets suffered acutely. The result was depressed areas. In 1925 the monetary purists could at last rub their hands. The pound again looked the dollar in the face, and the gold standard was re-established by Act of Parliament. Unlike that of 1816, the standard now established was a gold bullion standard. Gold coins were withdrawn from circulation, but paper could always be converted into gold in the ratio of 400 ounces (Troy) for £1,699 11s. 8d. sterling. Permission to export and import freely was granted. Between 1923 and 1928, about thirty other countries went back to the gold standard.

But the new world was vastly different from the old. The machinery of the gold standard creaked and groaned. Eventually it ceased to work. International public debts clogged the workings of foreign trade, while a wave of nationalism put fresh obstacles in the path of commerce. A major reason for the success of the gold standard operated before the war of 1914–18 is that Britain, the great creditor nation, was always willing to accept payment of interest and capital in goods. If a debtor country cannot pay in goods, it must export gold, with disastrous results. The reserves of its central bank are depleted, and sooner or later its whole financial structure becomes insecure. The climax is a declaration that the country in question cannot permit any further export of gold. It then goes off the gold standard. This was the experience of the raw-material producing countries in the world crisis of 1929–32. By its policy of protection, America saw its imports of gold increase to an embarrassing extent. Had it permitted the gold to affect purchasing power, according to the rules of the gold standard game, prices would have soared and exports would have fallen Instead, it hoarded gold The precious metal so laboriously raised from the mines of South Africa was shipped to New York and returned to the earth, whence it came. The vaults of the Federal Bank were crammed with the golden ingots to which the country rightly refused to bend the knee

The United States had a stock of 4,593m dollars of monetary gold in 1930 out of a world total of 11,546m dollars. France, too, was hoarding gold, while London and other countries saw their reserves shrink. Torn between the desire to be orthodox financiers, maintaining the gold standard at all costs, and to be realists and men of the world by abandoning it, the Labour Party, then in power in Britain, did little to stem the tide of disaster. Conservatives, anxious to make domestic capital out of a situation of international scope, declared that the country was heading straight for disaster through



TIME CHART 12. THE GOLD STANDARD

the extravagance of a socialist administration. The National Government got in, ostensibly to save the situation. It abandoned the gold standard in November 1931, two months after taking office. Soon other countries had to follow suit, and early in 1933 the United States joined them. Within twenty years gold was twice deposed from its position. The money machine could no longer carry on by its own steam. It is unlikely that it will ever again be left to the inscrutable and unpredictable pressure of gold as its working fuel

THE MONEY MARKET

As the central bank, the Bank of England is not only in command of the money machine of this country, but, as the chief pillar of the London money market, can exert a deep influence on trade and finance throughout the world in peace time. The crisis of 1931 demonstrated how extensive is the financial web which spreads over capitalist countries, linked together, as they are, by foreign trade, capital investment, and interest payments. In all the financial dealings involved in the transfer of goods from one part of the world to another, the London money market plays a leading role.

For centuries the *venue* of financiers, Lombard Street was still the heart of the money market when war broke out again in 1939. The money sold in this market is short-term credit. In its provision the Bank of England, the joint stock banks, the discounting houses and accepting houses, are all concerned. The demand for most of this short-term credit comes from foreign trade, and the document most commonly used is the bill of exchange. The exporter draws a bill of exchange on the importer for the value of the goods. The bill is then sent to the importer for his signature—his "acceptance"—to signify that he takes responsibility for the payment of the bill at maturity. Since his signature may not be a sufficient guarantee that the bill will be met, financial institutions called accepting houses have come into existence. The common practice, therefore, is for a bill to be "accepted" by an accepting house, which thereby guarantees the bill. Naturally they only accept bills for those for whose credit they have good assurance. The exporter now possesses a bill, payable in three months' time, and guaranteed by a reputable financial house. Generally he is not prepared to wait for three months before getting his cash, so he discounts his bill, that is, he gets the present value of it.

The ordinary commercial banks used to play an important part in accepting and discounting bills. They still do a large amount of this work, but of late the transactions have got more and more into the hands of special institutions, called accepting houses and discount houses. Since the limited liability legislation of last century, the work of discounting has increasingly passed into the hands of large firms. In the mid-eighties the Union, the National, and about a score of private firms, made up the discount houses of the time.* According to the Macmillan Report, the Discount Market of London consisted in 1931 of three public companies with capital and reserves amounting to over 6m pounds, four private companies with a capital of

* Clapham, ii, 355.

about $1\frac{1}{2}$m pounds, seventeen private firms and eight running brokers with a capital of roughly 8m pounds. The capital of these discount houses is invested in securities and used to guarantee loans granted them by the banks. The funds employed in the actual discounting of bills are thus obtained from the banks and other financial houses. It is in these short-term advances that the banks invest their liquid resources (Macmillan Report, 43). The Bank of England is the presiding judge over the money market. In effect, it is the bank which regulates the supply of credit to the market. Last century, when the commercial banks had so extended credit as to be unable to provide more funds for the market, bill brokers went to the Bank of England. By raising the rate of discount (the bank rate), the Bank checked borrowing, and at the same time attracted funds from home and foreign sources. By lowering the rate, it encouraged borrowing and discouraged depositing

Thus the development of the banking system of Britain has been towards unification and centralized control under the Bank of England. Amalgamation has concentrated most banking in England, and some in Scotland, in the hands of the "Big Five"—the Midland, the Westminster, Barclays, Lloyds, and the National Provincial (see Sykes, *Amalgamation Movement in Banking*) Finance has become so powerful a force in the world that it can wreck governments and determine social and foreign policy. Its traditional conservatism, the belief in "sound money," inclines its officers to adopt a policy of reaction in the face of rapidly changing economic circumstances. An institution such as the Bank of England, which holds the financial destinies of Britain in its hands, therefore wields a power too vast to be left in the control of private enterprise; but the transference of the Bank of England to the State, now effected in 1946, will not of itself solve the problem of distribution in an age of plenty; nor, indeed, will any scheme for controlling the money machine propounded by financial heretics, who at all times of depression get a hearing for their proposals, provide a panacea for the sickness of an acquisitive society A monetary policy designed to keep the pound steady will be incomplete unless linked to real costs in industry. In face of falling prices due to technological advances, it is a crowning folly to prevent prices from falling by pumping money into the system. The public control of the money machine is essential in a planned society which aims at the full utilization of our material and human resources for the good of the people; but its effective control calls for radical changes of the machinery for producing and distributing the things of which money is merely a token.

CHAPTER X

COMMERCE AND FOREIGN INVESTMENT

THERE was a time when the foreign trade of Britain was in the hands of Germans, French and Italians. Being concerned mainly with agriculture and the manufacture of simple goods for their own consumption, the English and the Scots were willing to allow foreigners to bring to their shores the costly articles of medieval commerce. These foreigners had trading privileges in London and other ports, as the Great Powers possessed until recently rights in the Treaty Ports of China England began to exploit the possibilities of foreign trade before Elizabeth's reign. By the end of it the last of the foreign privileged traders had been expelled. Then it was that the first great trading company—the East India Company—began its career of more than two centuries. Its foundation indicates the beginning of a new era. No longer willing to recognize the claims of the Portuguese to the exclusive right of trade with India and the Far East, London merchants sent their own ships round the Cape, and the Company had soon established trading stations in India, on the Persian Gulf, and in the Spice Islands. About the same time, other Englishmen were planning an overseas empire In 1609, the Company of Virginia was incorporated. In the days of James I, England set out in earnest on overseas trade, colonization, and capital investment. Long before the industrial revolution, Britain had become a great commercial nation, with far-flung possessions and an extensive commerce.

At first the overseas trade was mainly in goods such as silks, cottons, tapestries, and spices from the east, and tobacco from the west. Before 1700 this trade was having a profound influence on social standards and economic organization in Britain. Contemporary writers of the Restoration period point out how fashions in dress and furnishings were changing rapidly as the more highly finished products of India came to these shores. These changes worked their way down through society. Ordinary people were coming to prefer cottons to the traditional homespun. Diet was changing. The tables of the upper and middle classes now had tea, sugar, coffee The smell of tobacco was too familiar to attract attention.

Growing foreign trade brought great wealth to those engaged in it. Many were the fortunes made in the East India trade and in the tobacco and sugar traffic with the American colonies. Standards of living rose, and this fed the demand for the products of east and west. Fired by such example, lesser people copied the new fashions in dress and the new style of living. As demand for these products spread throughout society, prices fell. What hitherto had been for the purse of the wealthy alone, now reached craftsmen and even peasants. The new commerce, so profoundly influencing social customs, stimulated manufacturing industries, especially those catering for the household and for the needs of the colonists The Scottish linen industry as well as the Glasgow hardware industry found an expanding market for

their products in North America. Manchester fustians and Birmingham trinkets were shipped in large quantities to Africa (Fig 46).

THE EXTENT AND COURSE OF FOREIGN TRADE

In 1720 the imports of Great Britain amounted to 6m pounds, and exports to about 7m pounds. Forty years later, imports had nearly doubled, and exports had more than doubled. These statistics of overseas trade were the Official Custom House Valuations, according to which goods were valued not at their market prices, but at certain official values laid down in 1697, when the office of Inspector-General of Imports and Exports was first created They therefore indicate the volume rather than the value of traffic. Such figures continued to be published in this form down to 1854, but from 1799 they were supplemented by others of "declared values" based on current prices.*

Rapid increase of exports was in part due to the growth of a large re-export trade. According to the Navigation Acts, certain colonial products had first to be shipped to Britain before going to their final destination. Out of a total export trade of 16m pounds in 1784, 5m pounds of goods were re-exports to the Continent and to Ireland. The striking feature of Scotland's trade at this time was the very high proportion of imports that were re-exported. In 1771 the total imports were £1,386,369 and the re-exports £1,353,861, the home-produced exports being only £503,473. Scotland's prosperity was bound up with commerce, and narrowly on two commodities, tobacco and sugar.† Down to the American War of Independence, the commodities of overseas commerce were few in number and the markets mainly the British possessions. From the West Indies and the American colonies came tobacco, sugar, rice, tar and wood From India, textile goods, spices, and tea. British manufactured goods found a ready market in America, but until Lancashire built up a great cotton industry, outward-bound ships to India found it difficult to get cargoes. All the time trade with Europe expanded and was of the first importance.

THE INDUSTRIAL REVOLUTION AND COMMERCE

The expansion of commerce in the two centuries preceding the Napoleonic Wars was one of the main causes of the industrial revolution. The new markets stimulated industrial development, and the capital accumulated in commerce overflowed into industry It was, says the late George Unwin, "by a flow of capital inwards from commerce, that most of the early industrial enterprises of Lancashire were started, and that the immense expansion of the cotton industry was rendered possible."‡ Enriched by their profits in the tobacco trade, Glasgow tobacco lords purchased estates and helped to finance the new cotton industry. In the first half of the nineteenth century the volume of British exports at least trebled, while the price-level fell by one-half.§ Such rapid advance was not uniform. After 1815 there was a

* G. D H Cole, *British Trade and Industry*, 1932, pp 38–9.
† Scott, *Econ. Hist. Rev* , ii, No 2, 292–3
‡ *Econ. Hist. Rev.*, January 1927, 56.
§ Cole, 52.

serious set-back, due to the dislocation resulting from the Napoleonic War, and the deflationary policy of the Bank of England. Not until a year or so after the resumption of cash payments in 1821 did trade begin to pick up. Thereafter there were periodic crises and depressions.

The year 1825 saw a first-class crisis brought on by too rapid expansion and, more especially, by speculation in the newly-created republics of South America. Foreign loans were readily subscribed, and grandiose schemes were floated. Banks failed, and many commercial companies had to go into liquidation. By 1833 the sky had cleared. For a few years there was a boom in industry and overseas trade and investment, only to be followed by another crisis in 1837, when there was widespread unemployment in the manufacturing districts. The recovery of 1839 was followed by the "hungry forties." Trade recovered in 1843, only to crash again in 1847. There were thus many ups and downs, but over all there was remarkable expansion in industrial output and in commercial activity

More striking than the great increase in volume of foreign trade is its change of character. The expansion of the cotton industry is seen in the new and important place occupied by its raw material in our imports. In 1760, just before power-production was ready to multiply the output of this industry many times, the import of raw cotton was about 8,000 tons. By 1800 it had risen to 25,000 tons; by 1825–30, to an average of more than 100,000 tons; and by 1849, to 346,000. Before 1800 supplies had mostly come from the Levant, the West Indies, and Guiana. Following the adoption of Witney's cotton-gin, the slave plantations of the United States easily out-distanced all other sources. By 1826–30 the United States were supplying three-quarters of all the cotton consumed in the United Kingdom.*

Imports of wool were small, though increasing. England had only just begun to supplement her home supplies from overseas sources. Australia was thereby drawn into the economic web of which London was the centre. In 1806, 245 lb. of wool were imported from New Holland (Australia). This was the beginning. The bulk of the extraneous supplies were still obtained from Saxony and Silesia Through the enterprise of John MacArthur, captain of the convict garrison at Port Philip, an improved breed of sheep was now being reared on the new continent. Thereafter, imports of wool steadily rose Soon Australia entered on a remarkable phase of economic expansion, when sheep-farmer and squatter held the stage (see below, p 402). The import of wool (Spanish, German and Australian) rose from 11,000 tons in the late twenties to over 33,000 tons in 1849. The only other textile raw material was flax, the import of which grew with adoption of power-spinning in the thirties and forties. Timber was still an impressive item in the import trade, because still the essential raw material of the shipbuilding industry. In bulk it was very important. In value it ranged in the late thirties between 3 and 4m pounds. Together the imports of cotton, wool and timber amounted to about 20m pounds, at a time when British exports were well under 50m pounds.† Imports of sugar, tea and coffee were severely handicapped by heavy taxation, but priority in sources of supply gave

* Clapham, i, 241-2. † Ibid, 479

British shippers a large share in the carrying trade of Europe. London still retained an extensive entrepôt trade.

These imports were paid for by the export of manufactured goods and the re-export of colonial produce. The predominance of cotton yarn twist and piece goods in the export trade reflects the growth of the cotton industry of Lancashire and Scotland. Before 1800 the ancient woollen industry furnished the chief export. Now it was far surpassed by the cotton industry, whose products rose from about one-seventh to one-half of the total export trade in the first half of the century. "It is not surprising," says Clapham (i, 479), "that Britain's foreign trade presented itself almost as a problem in cotton, or that Manchester claimed a great share in the determination of the commercial—and industrial and social—policy of the country." Coal, iron and steel occupied an extremely small, though growing, proportion of the export trade. In 1830 the largest single customer for British goods was the United States, which took £6,100,000's worth out of a total export of £38,200,000, and much of it was in cotton goods. European countries together took £15,600,000; Asia, £4,100,000; all Africa, £744,000, Australia, £300,000, the British North American colonies, £1,900,000; the British West Indies, £2,800,000; and South America, with Mexico, £5,200,000. In short, the bulk of the exports went to the cotton, sugar and timber-producing countries, as well as to the South American republics which had acquired purchasing power by heavy borrowing in the London market.*

THE ADOPTION OF FREE TRADE

The need to regulate foreign trade, so as to assure a favourable balance, was a favourite maxim of mercantilists in the two centuries that preceded the industrial revolution Duties were heaped on duties with the object of restricting imports and preventing the export of vital materials Britain, of course, was not the only country which checked the free flow of trade. Germany, France, and other European countries piled their barriers so high that trade was practically impossible, except by smuggling So determined was France to protect her own home market that she made it illegal to import textile yarns or fabrics of any kind. In 1810 Russia prohibited the entry of all foreign manufactures (Fig 47).

In his *Wealth of Nations* (1776), Adam Smith had mercilessly criticized this fiscal policy. He wrote at a time when Britain was on the threshold of industrialism, and he showed the great advantages that would follow from division of labour and specialization. He urged that exchange is a mutually beneficial process. So artificial restrictions on the free flow of goods are detrimental to national interests. He laid bare the real nature of foreign trade, and showed how it rested on international division of labour, by which "the different states into which a great continent was divided would so far resemble the different provinces of a great empire." The Eden Treaty of 1786, which reduced duties on trade between France and Britain, was a first fruit of the new outlook; but the Napoleonic War checked the movement. When peace returned, efforts were once more directed to freeing the channels

* Clapham, i, 250.

of trade. The growing industrialization of Britain gave her manufacturers a vested interest in free trade. They had nothing to fear from foreign competion. Indeed, a free trade Britain might even encourage foreigners to lower their tariffs, and so open still wider markets for British products. The protected markets, for the most part, lay in Europe. Elsewhere in the tropics and sub-tropics, markets were unprotected and unlimited. Manchester, says Clapham, "lived on 'shirts for black men,' and yellow men, and brown men, and for the Moslem world."

A London Merchants' *Free Trade Petition* of 1820 marks the starting-point of the resumed fight for free trade. It is as follows:

The Petition, *etc.*
Humbly sheweth

That foreign commerce is eminently conducive to the wealth and prosperity of a country, by enabling it to import the commodities for the production of which the soil, climate, capital and industry of other countries are best calculated, and to export in payment those articles for which its own situation is better adapted.

That freedom from restraint is calculated to give the utmost extension to foreign trade, and the best direction to the capital and industry of the country.

That the maxim of buying in the cheapest market and selling in the dearest, which regulates every merchant in his individual dealings, is strictly applicable as the best rule for the trade of the whole nation.

That a policy founded on these principles would render the commerce of the world an interchange of mutual advantages, and diffuse an increase of wealth and enjoyments among the inhabitants of each State (quoted *English Economic History, Select Documents*, 698)

Two leaders of the movement were Huskisson (President of the Board of Trade, 1823–7) and Peel (Prime Minister, 1841–6). Huskisson revised the tariff system by abolishing prohibitions and prohibitive duties, substituting moderate duties not exceeding 30 per cent *ad valorem*. The obnoxious Corn Laws alone remained intact, because it was impolitic to interfere with a duty so whole-heartedly supported by the landed and farming interests. Huskisson also revised the Navigation Acts, and concluded reciprocity treaties with many European countries, thus removing restrictions on shipping on the basis of mutual concessions. More concerned with administrative than financial reform, the Whig Government of 1830–41 made no important contribution to the free trade movement, and when Peel took office as Tory Prime Minister in 1841, reform was urgent The Committee on Import Duties of 1840 laid bare a chaotic state of affairs. They showed that the duties on seventeen kinds of articles alone produced no less than 94·5 per cent of the total customs revenue Yet there were nearly nine hundred kinds of articles on the customs list at this time. Of these, 147 yielded no net revenue, and 349 produced only about £8,000. The Committee proposed the concentration of customs duties on those articles which yielded revenue. Such a reform would not only help trade and benefit the revenue,

"but would at the same time greatly diminish the cost of collection, remove multitudinous sources of complaint and vexation . . . and consolidate the

great interests of peace and commerce by associating them intimately with the prosperity of the whole family of nations" (quoted Redford, *The Economic History of England*, 1931, 175).

Other changes followed in 1842 and 1845 In the former year a maximum rate of 5 per cent on imported raw materials, and of 20 on manufactured goods, was fixed. In the latter, 520 customs duties (including duties on bulrushes, canaries, fossils, and manna) and all the remaining export duties were abolished. Meantime the agitation for the repeal of the Corn Laws was reaching its climax. It was supported whole-heartedly by the labouring classes as well as by manufacturers, who allegedly believed that cheap food would mean cheap labour. The Anti-Corn Law League, founded in Manchester in 1838, under the leadership of Cobden and Bright carried on propaganda throughout the length and breadth of the land. While food was dear, interest was aroused and passions inflamed, but when trade improved the movement lost support In the end, the catastrophe of the potato famine in Ireland during 1845 made the success of their campaign inevitable. The Government was forced to suspend the Corn Laws. Peel realized that once suspended they could never be re-imposed. In 1846 Parliament repealed them.

The final stage in Britain's adoption of free trade was carried through by Gladstone, himself a disciple of Peel. In his budget of 1853 he freed 123 articles from customs duties and reduced the rates on 133 others Fully manufactured goods were not to be charged more than 10 per cent. In 1860 he added further articles to the free list, and in the relatively few cases (there were only 48 dutiable articles) where tariffs remained, they were retained for revenue rather than for protective purposes. The year 1860 is also important for the conclusion of the Cobden-Chevalier Treaty between Britain and France. Britain agreed to abolish all duties on manufactured goods, and to reduce the duties on wines and brandy. France, on the other hand, abolished all prohibitions, and lowered the duties on British coal, iron, steel and machinery and textiles Britain did not limit her concessions to France. She extended them to all countries. For the next seventy years the United Kingdom remained a free trade country.*

VICTORIAN PROSPERITY

Between the repeal of the Corn Laws in 1846 and the beginnings of the Great Depression in 1873, Britain experienced great industrial and commercial prosperity. When the Great Exhibition took place in 1851, Britain stood confident before the world, assured of her ability to supply any market and certain of her ability to meet the competition of any country. She could open her ports to foreign produce, knowing full well that she need fear no rival in the market for manufactured goods. Twenty years later, statistics of her exports and imports, of her production of coal, iron, steel and cotton goods, showed a phenomenal expansion. In 1854 exports were valued at 97m pounds. In 1873 they stood at over 200m pounds Imports in the former

* For an excellent short account of the Free Trade Movement, see Redford, Ch. XIII

year were 152, and in the latter, more than 370m pounds. Even allowing for a small rise of about 7 per cent in prices between these dates, the increase in foreign trade is considerable. Figures for industrial production are equally striking Coal production rose from 65m tons in 1854 to over 130m tons in 1875, and pig-iron from 3 to 6m tons. Starting at a very low level, production of steel rose fourfold between 1850 and 1870, then threefold by 1875, and again twofold by 1881. The yardage of cotton cloth rose by 130 per cent between 1850 and 1870, and by 200 per cent between 1850 and 1880. The clearance of ships from British ports rose from 9,500,000 tons to 23,500,000 tons between 1854 and 1875, and these figures underestimate the increase. Owing to the use of the steamer at the latter date, shipping was much more efficient (Cole, 74–5).

Every acceptable index points to unprecedented prosperity. This was the hey-day of capitalism in Britain. Small wonder that the Victorian individualist and man of affairs waxed eloquent on the virtues of capitalism. Britain appeared to have established an economic system which was without rival by all known tests. Its expanding production seemed to hold opportunities of service and wealth for everyone; but there is another side to this picture. The standard of living had risen, it is true; but there was a vast amount of poverty, ill-health, malnutrition, and overwork.

"To whom, then, is this wealth of England wealth?" cried Carlyle. "Who is it that it blesses, makes happier, wiser, beautifuller, in any way better? Who has got hold of it, to make it fetch and carry for him, like a true servant, not like a false mock-servant, to do him any real service whatsoever? As yet no one. We have more riches than any Nation ever had before, we have less good of them than any Nation ever had before. Our successful industry is hitherto unsuccessful; a strange success, if we stop here! In the midst of plethoric plenty the people perish; with gold walls, and full barns, no man feels himself safe or satisfied" (*Past and Present*, 75).

These were no idle words; nor was Carlyle alone among those who challenged the complacency of the Victorians. Ruskin put it thus. "The question for the nation is not how much labour it employs, but how much life it produces. For as consumption is the end and aim of production, so life is the end and aim of consumption." Tremendous increase in production was sufficiently evident. Its causes were many, but two stand out. Technological advances and improved organization were everywhere reducing costs, so swiftly indeed that the tremendous capacity of mill and factory seemed to hold out untold possibilities for the human race. It was also a time of rising prices. Australia and California were increasing the gold supply of the world, thus stimulating their own demand for goods and giving a fillip to industry in Britain.

During this golden age of Victorian industrialism, Britain's ties with other countries were increasing daily, and London was strengthening its position as the economic capital of the world. The interdependence of her industries on foreign sources of materials and markets was becoming closer as railway and steamship reduced freights and abolished isolation Britain had become an industrial country, buying her raw materials by the export

of manufactured goods. She could still produce a high proportion of her food, but she could not do without foreign imports for long The proportion she had to import was steadily rising. Probably about 25 per cent of the bread corn consumed in Britain in 1850–2 was imported, mainly from Russia Ten years later it was nearing 40 per cent. By the end of the seventies it exceeded 50 per cent. The Crimean War interrupted the wheat trade with Russia, but by this time the United States, now feverishly building railways, was increasing her exports of wheat and flour. The Civil War postponed America's conquest of the British food market, but "the dominance of the United States was unquestioned" by the seventies. In 1881 almost two-thirds of Britain's requirements of wheat and flour came from this source Because of their perishable nature, imports of meat were less considerable. In 1884–6 the United Kingdom still possessed about 10,700,000 head of cattle. In those years she imported on an average only 372,000 head and 53,000 tons of beef; and beef imports on this scale were comparatively recent. In the last decade of the century, however, chilled and frozen meat began to pour in as vessels were equipped with refrigerating plant.*

Thus Britain's dependence on foreign supplies of food became more and more marked as industrialism advanced. Of the raw materials imported, cotton was by far the largest item In her early industrial days Lancashire had drawn her raw materials from many countries. Between 1820 and 1850 the United States had become the most important source. In 1820 she dispatched more than half the cotton requirements of Britain. By 1830 she was sending three-quarters, and was the only country keeping pace with the world's tremendous consumption of cotton goods. Naturally Lancashire was a little alarmed at so great dependence on a single source of supply, and she had reason to regret it when the American Civil War broke out in 1861. Feverish efforts were made to find alternative sources, but the contribution of such new sources as India, Egypt and Brazil were still small when the war was over. By 1870 America was once more supplying half of the British requirements, and by 1880–4, 74 per cent. Because of wheat and cotton, Britain's ties with the United States were close indeed. Together they accounted for nearly a quarter of her total imports.

During this period the cotton industry was still Britain's greatest industry, and cotton goods her greatest export. Next to cotton came wool Together they accounted for 60 per cent (in value) of the exports of the United Kingdom in 1850. As the century drew to its close, the proportion tended to drop, but as late as 1880–4 it still averaged 46 per cent The significant fact of Britain's trade at this time was the export of consumable goods which had to be continually renewed. Britain was in fact clothing the world. As we have seen, Australia was sending wool to England in the twenties, and by the time of the Great Exhibition she was supplying the bulk of Britain's demands. The jute industry of Dundee was now based on Indian jute. Another trade link with the Empire had been forged.

* Clapham, ii, 218–19.

UNITED KINGDOM IMPORTS IN MILLION LBS. ANNUAL AVERAGE

(Clapham, ii, 225)

	Cotton	Wool	Flax	Hemp	Jute
1850–4	825 0	95·2	175 5	107·6	48·4*
1860–4	946·4	167 2	176 2	102·9	132 9
1870–4	1,524·3	307 0	265·0	132·8	420 3
1880–4	1,714·7	486 0	215·7	150·6	616·3

* Three years only.

Meantime the mining and metallurgical industries were also increasing their quota of exports. The export of coal, mainly to Europe and the Mediterranean, rose from 1m tons at the accession of Queen Victoria to between 3m and 4m tons in the early fifties, and to over 20m in the quinquennium 1880–4.* Exports of iron, steel and machinery rose rapidly though erratically, being affected by bouts of railway building abroad, and by tariffs as countries protected their infant metal industries. In 1848 their value stood at only 6m pounds, by 1870 the figure was 29½m, and in 1873 46m. Important as these exports were, they were easily dwarfed by the export of textiles, though the proportion was changing in favour of iron and steel. The following table shows the relative importance of the principal exports:

ANNUAL AVERAGE VALUES, 1880–4
(Clapham, ii, 229)

Of all British and Irish produce exported	£234,000,000
Of all yarns and textile fabrics	108,000,000
(Of which cotton	76,000,000)
Of coal, iron and steel	38,000,000
Of hardware, cutlery and machinery	15,000,000
Of articles of clothing	10,500,000
Of foodstuffs	10,000,000
Of chemicals and salt	6,200,000

Down to the eighties a third of British exports went to the Empire. The largest customer was India, which experienced rapid economic development under the stimulus of British capital after the Mutiny. Outside the Empire, the United States was by far the most important. It took from Britain fine cottons, linens, woollens and miscellaneous goods, as well as steel rails and machinery. It was, however, a variable market, for American economic life with its booms and depressions, its Civil War and its tariffs, did not offer an easy market at all times, like Germany, whose rapid economic development brought about increased consuming power. Down to the eighties Germany not only bought large quantities of British goods, but she obtained her overseas products through the London market.

* Clapham, ii, 226.

THE GREAT DEPRESSION

The last quarter of the nineteenth century witnessed a remarkable expansion of the output of food, raw materials and manufactured goods throughout the world. It was a phase of very rapid economic expansion, so rapid in fact that the economic machine suffered from repeated strains and stresses Between 1872 and 1896 there were three slumps and two intervening periods of recovery There was much talk about depression, and in some years unemployment rose to alarming heights As foodstuffs poured into Britain from the United States, land went out of cultivation The farming community suffered severely The prospect was so black that the period has been called "the Great Depression," though population and trade did in fact continue to advance phenomenally. "The outstanding fact, or group of facts, in the quarter-century," says Beales,* "was the rapid industrialization of other countries and the further industrialization of this" Between the early seventies and the late nineties, coal production in Britain rose from an average of 121m tons to 202m tons, in the United States from 43m to 189m tons, and in Germany from 32m to 89m tons. Steel production rose in Great Britain from 500,000 tons to 4,200,000 tons; in the United States and Germany from a negligible amount to 7½m tons and 5m tons respectively †

Britain's industrial supremacy received a challenge when Germany and the United States got into their stride. Feverish search for markets resulted in the partition of Africa and a struggle for supremacy in China. It also promoted tariff walls around almost every country, now eager to protect itself from the avalanche of goods which the ingenuity of man had shown how to produce. Though Britain stuck to free trade, there were also voices for "Fair Trade," as it was called; and Joseph Chamberlain launched his great Tariff Reform Campaign in favour of protection for British industry and trade within the Empire at the opening of the present century. Despite strong public opinion in favour of free trade, the Conservative Party adopted protection as their platform Most of the arguments advanced in its favour were wrong-headed, but they had at least one redeeming feature. Tariff Reform was a challenge to the old *laissez-faire* doctrine, by this time losing its grip on internal affairs. It pointed the way to a more rational organization of foreign trade than the senseless and wasteful competition that closed the Victorian era. Shipping control during the war of 1914–18 showed how much could be done to eliminate waste and plan international trade on efficient lines.

In spite of formidable competition from other countries now industrialized, Britain increased her foreign trade at a rapid pace till the outbreak of war in 1914. Between 1896 and 1913 her exports increased in value by 119 per cent, while wholesale prices rose by 39 per cent, and retail food prices by about 25 per cent. Everywhere, markets showed a capacity to absorb more and more British goods. Between 1896 and 1913 the value of British domestic exports to Canada rose more than fourfold, to the Argentine more than

* *Econ. Hist. Rev* , October 1934, 73. † Cole, 86.

threefold, and more than doubled to France, Holland, Russia, Italy, China, Japan, India, and New Zealand. Even in the heavily-protected American market, British exports increased by 43 per cent. During the years before the war of 1914–18, Britain was regularly exporting one-third of all she produced. Part of her increased exports was due to the investment of capital overseas. This is reflected in the kinds of goods exported. Textiles, and especially cottons, still remained the chief item of export trade, but they were losing their pre-eminence. In 1896 they accounted for 39 per cent, and in 1913, 31 per cent of the exports of the United Kingdom. Coal, iron, steel and machinery, on the other hand, increased their share from 23 per cent in 1896 to 27 per cent in 1913.* A testing time was yet to come for Lancashire; but before 1914 prospects were still bright. There seemed to be an insatiable demand for cotton goods throughout the world; but a country which exported cotton machinery could not expect to retain her markets for cotton fabrics indefinitely. The cotton mills of India and Japan, largely equipped and directed by Lancashire labour, were a silent challenge to British exports in the Far East.

EXPANDING MARKETS

Many circumstances combined to bring about this prodigious and prodigal expansion of commerce. World population rose from 836m in 1800 to 1,551m in 1900.† In Europe especially there was a steady rise of the standard of living. In the same period the value of international commerce increased about twentyfold. So the greater number of consumers is not sufficient to account for the tremendous growth of trade. There must have been other agencies at work. One was that movement of exchange was facilitated by removal of restrictions on trade. Within Britain regional trade barriers had long since disappeared, though the old mercantilist restrictions on commerce did not disappear until the Victorian era. In Europe the steady unification of the German states, beginning with the Zollverein or Customs Union in 1834 and culminating in the creation of the German Empire in 1871, freed trade within a large area of Europe from age-old restrictions Outside of Europe markets opened up in South America and the Far East. Ever since the Great Discoveries South America had been dominated by Spain and Portugal. Now, as the colonies achieved their independence, a stranglehold on their trade maintained by their conquerors relaxed. Trade with Brazil was thrown open in 1807. Soon afterwards Mexico and Latin America followed suit. The abolition of the East India Company's monopoly of trade to India in 1813, and to China in 1833, opened the door to the European merchant in the Orient (Figs. 48 and 49).

The wind-up of the East India Company's monopoly of trade was immediately followed by a rush of British merchants to Canton, anxious to ship opium from the fields of Bengal. For many centuries China had been unwilling to admit the westerner to trade in his country In 1793 the Emperor of China wrote to George III: "I set no value on objects strange or ingenious

* Clapham, iii, 66; Cole, 102–3.
† *World Population*, by A. M. Carr-Saunders, 1936, 1921–30.

and have no use for your country's manufactures." The Opium War (1839–42) was at bottom an attempt to compel China by force to admit European manufactures. As a result of the conflict, Britain received an indemnity, trading concessions in five Treaty Ports, and the possession of Hong Kong which soon became the commercial clearing-house of the East. China was forced to take Indian opium and western goods In 1856, another war was forced on China, and this time the French sided with the British. Canton, the emporium of the East, was bombarded, and western troops marched to the gates of Pekin. The Treaty of Pekin (1860) broke down the last rampart of China's exclusiveness. China had to take western traders and western civilization whether she wished them or not

Before 1854, when the guns of American warships compelled her to grant trading concessions, Japan had excluded European merchants more effectively than China. British and other European powers followed in the wake of the United States. Japan then decided to change her own civilization in her own way. After the Revolution of 1868, she swiftly remodelled her industries on western lines, and adopted the economic and financial devices of capitalist countries. Thus, taking a leaf out of the book of European nations, she made imperialist claims on China At the conclusion of the Sino-Japanese War in 1895, China had to recognize the independence of Korea and to cede to Japan the Island of Formosa with the strategically important Liao-tung Peninsula. This was a shock to the European Powers. Since 1891 Russia had been building her Trans-Siberian Railway to the Mongolian border, while France, having captured Tongking, aimed at bringing southern China under her influence. Germany and Britain were eagerly looking forward to their share in the spoils. The outcome was that western powers compelled Japan to give up the Liao-tung Peninsula and the harbour at Port Arthur. They then proceeded to help themselves Germany secured the lease of Kiao-chau, Russia Port Arthur, France Kwang-chau-wan, and Britain Wei-hai-wei. Before the close of the century, European powers were thus firmly entrenched in the Far East Britain was pouring its shiploads of cotton goods into China and bringing back tea.

The geographical framework of commerce extended enormously. Meanwhile movement of people across the face of the earth was unlocking new resources and increasing the purchasing power of new lands It has been estimated that about 55m people emigrated from Europe in the hundred years after Waterloo, and of that number, 19m came from Britain Most went to the United States, which absorbed 36m, South America took nearly 10m, and Canada over 4m. These peoples helped to develop the resources of lands to which they went, and likewise created large markets for the manufactured produce of the industrialized countries. Improved communications encouraged the process. Railways penetrated the interiors of continents and broke down the isolation of inland places.

A network of railways first grew up in Britain between 1825 and 1850. This encouraged exploitation of our mineral resources and enabled the produce of the countryside to be brought to the teeming population of the towns. In the continental areas of the world, the effect of railways was more dramatic. It placed Germany on the economic map of Europe, from which

she had been largely excluded since the traders of medieval times deserted the old routes for the wide ocean. As railroads reached out westwards, the various states in America came within a more closely-knit economic system. The product of the prairies now reached the ports for shipment to Europe. With the rest of the continent, Canada shared the benefits of better communications. The wheat-fields of Manitoba, Saskatchewan and Alberta were able to serve the needs of Britain.

The wheels of commerce speeded up as goods flowed along the steel railways, in steel wagons, for transport by fast steel steamers. The railways were at first more important than the steamer. The latter merely replaced sailing vessels. The former provided a means of communication between districts hitherto cut off from the main stream of economic activity. The progress of the steamer was slow. Steamships needed coaling stations, and long voyages called for technical improvements of marine engines and their boilers. So it was not until the close of the century that victory over the sailing-ship was complete. The Suez Canal, opened in 1869, created a new and shorter through route to the East; and great steel inventions, taken up simultaneously by Britain, Germany and America, led to a boom in shipbuilding with keen competition for freights. This made transport cheaper because the carrying capacity of the steel steamer was much more than that of the sailing-ship.

If the railways and the steamship routes were the arteries of commerce, the telegraph lines were the nerves. In the early fifties cables were being laid in shallow and narrow seas. Before the death of Victoria the world had been bound together by copper wires Overland and beneath the seas, cables stretched across and between all the important countries The railway, the steamship and the telegraph had made the world a smaller place.

THE NEW COMMERCE

Commercial development has been a process of geographical expansion. Markets have extended their scope from the local to the regional, from the regional to the national, and from the national to the international. Over the greater part of Europe most goods were bought and sold for many centuries in countless little markets to which the people of a district came once a week There the produce of the countryside was exchanged for that of the towns. Many of these small markets survive for the sale of perishable commodities such as vegetables and dairy produce, but to-day their importance is trivial. At longer intervals there used to be fairs, to which merchants and travellers came from far afield bringing their wares with them. A typical example is the famous Stourbridge Fair, near Cambridge, described by Defoe in his *Tour Through Great Britain* in 1723. On the Continent there were great Fairs at Leipzig and Frankfurt in Germany, Dijon in France, Medina del Campo in Spain, Nijni-Novgorod in Russia.

The new transport of the nineteenth century completely revolutionized this scale of commercial operations. There was a change in the direction of trade as the railways created new routes throughout the continental areas of Europe and America. Germany now became an important highway of

trade between east and west Europe. In the United States and Canada the consequences were more far-reaching. Trade routes had previously run north and south, following the river valleys and the coast. The railways could run east and west Goods could be moved in bulk, cheaply and easily. Thenceforward, markets for some commodities, such as wheat, tea and rubber, embraced almost the whole world. As railways and steamships bound the world together, the European could draw his wheat from the United States, his tea from India and China, his wool from Australia, his cotton from Egypt, India and America. The whole world could contribute to the needs of the humblest family.

Movement of goods in bulk and an enormous expansion in the scope of commerce introduced new methods of buying and selling. The fairs disappeared one after another, or shrank in importance. Produce markets, such as the Liverpool Corn Exchange or the rubber, tea, coffee and sugar exchanges of London, or the Cotton Exchange of Manchester, took their place. These exchanges became the nerve centres of world markets, where goods were bought and sold merely by specimen or simply by specification. Along the telegraph lines and the cables passed news of crops, of the movement of goods, of stocks, of demands, and so on Within a single century the commercial traveller with his samples usurped the place of the itinerant merchant with his wagon of goods. One aspect of this changing order of commerce has been the appearance of the retail shop. There had been shops for many centuries, but they had been simply places where the producer or craftsman displayed the goods he had made Nearly all retail dealing was concentrated in the weekly market. The retail shop usurps the function of the market-place in the nineteenth century. As all this business of buying and selling increased, the proportion of people engaged in commerce rose. From being general stores, like those of the countryside to-day, shops began to specialize in particular classes of goods and to use every device to attract the attention of passers-by. The large shop with many departments, first found in Paris, was copied in the large towns of this country, in the last twenty years of the century And about the same time the multiple shop, with its small branches scattered throughout the length and breadth of the country, now became a familiar sight.

INTERNATIONAL INVESTMENT

British capital built railways in Europe, in the United States, in South America, in Canada, in India and in Australia It encircled the world with cables and telegraphs, and participated in the economic exploitation of many lands. It stimulated production at home, and helped overseas countries to send the raw material and food which Britain required. Till about 1850 the main field of British overseas investment was the continent of Europe. Loans made at first were not for railway building nor for productive enterprise, but to help needy governments. The Napoleonic Wars left France in 1815 with a large indemnity to pay, and an army of occupation to maintain They also left a considerable part of Europe in a state of bankruptcy and economic disorder. Banking houses, such as Barings and Rothschilds, with head-

quarters in London and with agents or relations in all the capitals of Europe, threw themselves into the business of reconstructing the finances of Europe. Loans raised in London went to reconstruct the economic life and restore the shattered finances of France, Prussia, Austria, Russia and Greece.

About the same time a steady stream of capital poured into Latin America. Many bond-holders burned their fingers in speculative enterprises, especially those who had ventured their capital in the infant Republics of South America. In Europe, too, there were heavy losses in Greece, Spain and Portugal. This outflow of capital did not necessarily involve the direct export of goods, because some European countries wanted gold; but in most cases goods moved, though not directly between borrower and lender. Loans to South America were reflected in increased exports of military and naval stores, of cotton goods and hardware, so that exports rose from a declared value of £2,800,000 in 1818 to £5,572,579 in 1824, and to £6,425,715 in 1825 * Then came the crash. One state after another defaulted

Between 1815 and 1830 at least 50m pounds were sent to Europe, more than 20m to Latin America, and between 5m and 6m to the United States This was only a fraction of what was yet to come. So far the leading role had been played by the great financial houses of London, Rothschilds, Barings, and Ricardo Soon investors up and down the country were engulfed in the process of home and overseas investment, but the financial world was still dominated by a relatively small number of people In railway-building on the Continent a few giants, such as Thomas Brassey, held the field. Trained as a road surveyor and estate agent, Brassey became a great railway contractor, and at the height of his power employed eighty thousand workmen, owned iron and rolling mills, locomotive and carriage works in England and France. A man of this calibre did not wait until asked by a company to construct a railway He planned lines, obtained concessions, and created companies. There was hardly a country in Europe which did not know his work. In the early railway age European countries were largely dependent on Britain. The railways of France were a triumph of Anglo-French enterprise Capital, skill, and organizing ability poured across the Channel By the early fifties the shares of twenty French railway companies were quoted on the London Stock Exchange, and at least one English director was on the board of nineteen of them (Jenks, 165).

INVESTMENT AND THE PUBLIC

Before the days of railways and factories there were few concerns which required much capital. Hence dealings in shares were very limited. From the end of the seventeenth century, and throughout the eighteenth, there was buying and selling of Bank of England, East India Company, South Sea Company, and Government stock; but these transactions touched a mere fringe of the population and only a very small section of the economic field. Brokers used at first to meet to transact business in the street or in odd coffee-houses. In 1762 the more influential ones fixed on Jonathan's Coffee House in Change Alley. Later they moved to a new building of

* L. H. Jenks, *The Migration of British Capital to 1875*, 1938, 59

their own. They called it the Stock Exchange. At first it was still something of a coffee-house. Then in 1802, professionally strengthened by the increase of the national debt and investments in canal building, its members moved, five hundred strong, to premises in Capel Court.

As company after company was promoted to build its few miles of line, the railway boom of the thirties and forties accustomed a larger public to stocks and shares. Tradesmen, manufacturers, pensioners, merchants, ladies of means—in short, the mass of the middle class—was now drawn irresistibly into the financial web. They invested their savings in railway stock. "The Stock Exchange," says Jenks, "joined the House of Commons as an institution upon which the common hopes and fears of the enfranchised classes centred." The Companies Acts of 1852–62, which granted incorporation by mere registration and limited liability, naturally gave a great fillip to joint stock enterprise and therefore to investment.

"For the five years ending in 1861," says Clapham (ii, 357), "the annual average was 381 Companies with a total nominal capital of £21,000,000. In 1864 there were registered 975 Companies with a nominal capital of £235,000,000; and the figures for 1865 were 1,014 and £203,000,000."

In all this business of investment, the Stock Exchange, with its stock brokers and jobbers, is the clearing-house. The Stock Exchange which is a market for buying and selling shares, is almost entirely a product of the last hundred years In the last quarter of the century, investment advanced by leaps and bounds, and with it the work of the Stock Exchange. Membership rose from a little over 2,000 in 1877 to over 5,500 in 1905. Meantime the main industrial centres of England and Scotland opened local stock exchanges to deal with an ever-increasing business of company promotion, and to provide a market for stocks and shares.

The business of foreign loans and companies was usually in the hands of specialist concerns called issuing houses. Starting as merchant houses with world-wide ramifications, they have added financial activities to their ordinary commercial business. Thus Baring Brothers traces its origin to a wool business of Devonshire at the end of the eighteenth century. Before 1800 they were woollen merchants trading from London overseas. From wool they extended to Russian furs and Chinese silks, and then to Anglo-American trade. They began to play an important part in international finance after the Napoleonic Wars. The Duc de Richelieu is reported to have said: "There are six Powers in Europe, Great Britain, France, Russia, Austria, Prussia, and Baring Brothers." Jenks, from whom this quotation comes,* adds: "Barings was a synonym for the investment market at London." The Rothschilds trace their origin to a goldsmith of Frankfurt Members of this house wove a web of finance over the continent of Europe, as the Fuggers had done three centuries before In the generation after the Napoleonic War they had an almost complete monopoly of public loans. In the second half of the century other great financial houses entered the field, and exercised a profound influence over the politics of Europe.

* *The Migration of British Capital*, 36.

"There was the firm of Frühling and Goschen, which had come from Leipsic in the book trade and in the second generation was inoculating London with Egyptian finance and was supplying a minister of state. C J. Hambro and Son, after a century of distinction in banking at Copenhagen, opened a London house after the revolutions of 1848, and became Anglicized. This firm was in 1870 the leading one in the Scandinavian trade, and was at different times pre-eminent in Italian relations. J S. Morgan and Company, succeeding to the business of George Peabody during the Civil War, was a firm so English in character that it headed the London syndicate which offered the only serious competition to the Rothschilds for handling the French indemnity loan in 1871" (Jenks, 267).

BRITISH OVERSEAS INVESTMENTS

As the first stage of railway construction ended in western Europe, British capital had to look farther afield for investment. Railway building in France, Belgium, and Germany continued after 1850, but fewer lines were built by British enterprise. Moreover, steady improvement of transport was helping to create competitive conditions for British industry, as Europe itself embraced industrialism. From the fifties, the outflow of capital to eastern Europe, South America, the United States, Canada and India increased. In this movement there was more direct control from London, especially with respect to South America, Canada, and India, where administrative and financial skill was lacking.

The construction of railways in the Americas and in India increased the world's stock of raw materials and food. Wheat, cotton, rubber, and a score of other raw materials poured back into Europe, facilitating industrial expansion and increasing foreign trade. Since the bulk of the capital came from Britain, her economic system was enriched. There was greater demand for rails, for locomotives, and for rolling stock. Between 1856 and 1885 £163m worth of railway iron and many locomotives were sent abroad. A third of the capital raised for the Indian railways till the eighties was spent in Britain and in transport charges. Between the early fifties and 1885 the total capital of the United Kingdom invested abroad rose from a probable £300m to £1,302m.

"To watch doubtful foreign governments and keep the home government sensitive to bondholding opinion," the Association of Foreign Bondholders came into existence in 1868 * The American Civil War interrupted the movement of capital to the United States, but there were many other countries where it could find a good return, notably India, where railway and public works construction went on feverishly as shareholders were guaranteed a minimum of 5 per cent secured on Indian revenues. The peak year for overseas investment was 1872, when over £83 5m were added to Britain's holdings, bringing the total to near £1,200,000. Soon after, the depression, which so swiftly spread over British industry and agriculture, stopped foreign investment. There was no surplus for export. At the end of the seventies, there may in fact have been a debit balance, but trade improved in the early eighties. Capital exports increased erratically to £82·6m in

* Clapham, ii, 239.

1896. In 1902 they were only £11·2m Thereafter they increased rapidly to £140·2m in 1907, and after a slight setback in 1908, they rose steadily again. In 1912 Britain was exporting capital at a rate exceeding £220m.

At this time Britain's overseas investments amounted to about £4,000m, a figure far exceeding that of any other country. France was reckoned to have £1,800m, and Germany £1,250m * Nearly one-half of British overseas investments were within the Empire: Canada, £514m, Australia and New Zealand over £400m, India and Ceylon £378m, and South Africa about £370m; the United States accounted for £754m, the Argentine for over £300m, Brazil £148m, Russia £110m, and Mexico nearly £100m. British investments in Europe were quite small, amounting to no more than £219m, or 6 per cent of the total overseas investments, unlike France and Germany which had over 60 per cent, and 50 per cent respectively. Before 1914 the United States was predominantly a debtor country, but her foreign investments, mainly in Latin America and in Canada, amounted to about £540m. During the war of 1914–18 there was a fall in the total of overseas investments, as capital was realized to purchase war supplies abroad. In the twenties, investment overseas was resumed. In 1938 the position was as follows:

NOMINAL AMOUNT OF BRITISH OVERSEAS INVESTMENTS IN QUOTED SECURITIES, INCOME RECEIVED AND LOAN CAPITAL REPAID

(£ millions)

	Capital	Income	Repayment
Overseas Governments and Municipalities . . .	1,398	52·3	21·4
British Companies abroad	1,209	69·6	10 9
Foreign and Dominions Companies ..	685	43 0	6 9
	3,292	164·9	39·2

(Kindersley, "British Overseas Investments," 1938, *Econ. Journal*, December 1939, 692)

These figures do not include everything. There are large investments abroad in securities not quoted in London. There are subsidiaries and branches of companies whose main activities are at home. There are a large number of small private companies and partnerships engaged in manufacturing and trading abroad, as well as estate and property abroad owned by private individuals residing in the United Kingdom. All this may account for £400m, and together with the quoted investments bring the total up to £3,692m, providing an income of £184·9m.

Britain's large foreign investments were often cited as an infallible sign of her prosperity. By analogy with those of the individual, these were regarded as the savings of the nation. The sober truth is that they are the savings, or the possessions, of particular individuals who, of course, receive the income or bear the loss on them They do not belong to the nation as a unit, nor does

* *The Problem of International Investment*, Royal Institute of International Affairs, London, 1937, Ch IX.

the nation as a unit reap the benefits from them. In the ten years before the war of 1914–18, the rate of investment rose by leaps and bounds, reaching the gigantic figure of £226m in 1912. From 1896 to 1913 money wages rose by about 17 per cent, while retail prices rose by about 25 per cent. In short, the general standard of living fell. Meantime, little was done to reform the ravages of industrialism on social life. There were slums in plenty. Capital which might have been invested at home—to build houses, to produce clothes, furniture, and the countless other things necessary for reasonable comfort, went abroad into speculative ventures which often yielded nothing to their shareholders, or was lent to foreign states which often repudiated their indebtedness; but few, even among those who lost their savings, repudiated the system itself, which continued to increase. The savings of the country were invested abroad because there were profits for those who were lucky or shrewd. There was little or no profit to be made out of rebuilding the slums; but there were large rewards for building railways in Africa. The calculus of private profit determined the distribution of the nation's resources, and if people at home were too poor to afford adequate clothing or food or shelter, the machinery of capitalism decreed that they should remain ill-clothed, underfed, and badly housed Investment of capital overseas benefited the country only in so far as it enabled it to draw a revenue in the form of food and raw materials from abroad without exporting goods in return.

THE BALANCE OF TRADE

Britain has to import raw materials, such as cotton, wool, copper, tin, rubber and iron ore, and food such as wheat, sugar, tea, coffee and cocoa. She can pay for these only by exporting goods and services. Under these conditions foreign trade is a necessity for Britain. At many times in her history there has been controversy about how to balance the different items of such trade. At one time it was argued that the balance ought to be symmetrical, and this explains why trade with France and India was not regarded with favour in earlier centuries. Others point out that exports and imports of two countries seldom, if ever, balance. Trade is often three-cornered or multilateral. Imports from India are paid for by exports to the Continent. In considering the balance of trade, one must therefore consider the total foreign trade of a country. Even so it is generally true that import and export of goods will not balance, and this has often led to great confusion in the minds of people. Imports into Britain persistently exceed exports. This discrepancy can be explained by distinguishing between visible and invisible exports. Visible exports are goods of all kinds. Invisible exports consist of services which the receiving country must pay for, and this can be done by means of goods.

Of the invisible items of Britain's trade, the most important are capital (overseas investments) and the services of shipping, insurance and banking. The investment of capital abroad generally shows itself in increased exports of consumable or constructional goods. A country raises capital abroad because it requires purchasing power to buy equipment or constructional goods, and so the transaction results in increase of exports by the creditor country and increase of imports to the borrowing country. Since individuals

invest capital in order to obtain a return on their money, a country which has capital invested overseas receives interest which comes in the form of goods. Thus there is an import against which there is no corresponding visible export. There is, however, an invisible export—the services of the capital invested abroad. Thus each year, as Britain's overseas investments mounted, her imports increased, as investors at home drew tribute from the countries where they had invested their money. In 1913 the amount thus received was no less than £210m.

Foreign trade involves shipping, and since Britain had gained priority in shipbuilding in the age of steam and iron, she quickly captured a large share of the world's carrying trade. Before the war of 1914–18 her shipbuilding industry was greater than that of all other foreign shipyards together, and her mercantile marine was the largest and most up-to-date in the world, accounting for almost one-half of the world's steam tonnage. The next largest mercantile marine—that of Germany—was only one-fourth as large as Britain's Since British ships were used by foreigners, large payments were annually made, and these again came in the form of goods. Imports swelled because Britain was the world's greatest carrier In 1913 the net national shipping income amounted to £94m. The export was an invisible one—the services of shipping. Foreign trade requires financing and insurance. A large part of this business was carried on by London firms, and so a further income amounting to £25m in 1913 was received for this service. It is possible to arrive at a true appreciation of the balance of trade only when these and other smaller items are taken into account. The following table shows the chief items in Britain's balance of international indebtedness in recent years.

REAL BALANCE OF BRITISH OVERSEAS TRANSACTIONS

£ millions

(Cole, *British Trade and Industry*, 180)

	1913	1924	1927	1930
Excess of imports of merchandise and bullion	158	324	390	392
Excess of Government payments overseas		25		
	158	349	390	392
Excess of Government receipts from overseas	—	—	1	21
Net shipping income	94	140	140	105
Net income from overseas investments ..	210	220	285	235
Net receipts from short interest and commissions	25	60	63	55
Net receipts from other sources ..	10	15	15	15
Total	339	435	504	431
Total Credit Balance ..	181	86	114	39

THE FIRST WORLD WAR AND AFTER

The World War of 1914–18 brought great disturbance to the economic life of belligerent and non-belligerent alike. British foreign trade had to be curtailed because men and machines turned to the business of war. Scarcity of shipping space demanded drastic reductions in certain items of our foreign trade. Some exportation had, of course, to be carried on to buy food and raw materials, but the ordinary channels of trade were disturbed, and some were closed. Thrown more on their own resources, foreign countries which had hitherto been content to come to Britain for their manufactured products set about developing industries of their own. And as they showed their capacity to supply their own markets, they proceeded to capture markets which Britain was no longer able to supply. This was particularly true of the Far East, where Japan, now highly industrialized, extended her economic system beyond her own frontiers and served the markets of China and India.

When the war was over, conditions were very different from what they had been in 1913. The change from a war economy to a peace economy was not easy, especially when so many folk were content to try to re-establish pre-war conditions of capitalist enterprise. Excessive expansion of some industries, such as coalmining, engineering and shipbuilding, interruption of the export trade, development of the cotton industry in the East, political disorganization of India and China, a heavy fall in the value of silver, currency disorders in European countries followed by stabilization at a figure which gave a temporary stimulus to their export trade, tariff barriers that heightened as a wave of nationalism swept over Europe—all these things had a profound effect on Britain's trade. But there was something else that did so. The financial policy of the Government involved deflation and the reduction of monetary costs of production. Before equilibrium was restored, the gold standard was established in 1925. This handicapped Britain in foreign markets, because the new rate increased the gold costs of production, while other countries such as France, Belgium and Germany stabilized their currencies at a rate favourable to lower gold costs of production.

Our export industries suffered severe depression and unemployment, while the output of food and raw materials increased at a phenomenal rate throughout the world. The Macmillan Committee declared that the output of raw material increased by no less than 40 per cent and foodstuffs by 16 per cent, while the population of the world increased by 10 per cent between 1913 and 1928. Everything thus pointed to conditions favouring the growth of material welfare elsewhere; but falling wholesale prices and rising stocks of commodities impoverished the raw-material producing countries. This soon had its effect on Britain and other manufacturing countries. The world plunged headlong to the crisis of 1929–31. To save themselves from the avalanche of cheap food and raw materials, and to preserve their own economic life from the effects of advancing technology, all the countries of Europe raised their tariff barriers. Even Britain deserted her long-established policy of free trade. In 1921 the Safeguarding of Industries Act had given protection to a number of "key industries" and had

made provision for protecting industries suffering from foreign dumping. A few years later, taxes were imposed on silks and hops. Despite the emphatic verdict of the people at the 1923 election, the final break came in the crisis of 1931. On the ground that Britain was headed for irretrievable disaster by importing more than she was exporting, the newly-elected National Government proceeded in 1932 to impose a general tariff of 10 per cent, which was later raised to 20 per cent Most food and raw materials were exempt, but a measure of protection was granted to wheat by establishing a wheat quota, which, in effect, guaranteed the farmer a remunerative price above the world price. The difference was made up by a levy on flour.

During the Victorian age the proud boast of the professional apologists of the existing economy was that capitalism, as defined in the opening paragraphs of Part II (p 145), is a self-compensating system in which the interplay of human effort and human requirements conspires to achieve the maximum use of human resources and to promote the fullest exercise of human ingenuity. The decade before the second world war was the obituary on this engaging rationalization Against a background of burning wheat crops, subsidies to discourage farmers from growing more than they could hope to sell in the "free" market, shiploads of coffee cast into the sea, and introduction of insect pests to check a surfeit of rubber in the plantations, a complacent fantasy which had hypnotized a century lost its grip on any but the professional high priests and professional hirelings of high finance. Free trade versus socialism was a dead issue The real choice lay between an economy rigidly controlled to ensure a minimum monetary profit for the privileged few and an economy of common ownership rationally planned to guarantee the satisfaction of needs which all human beings share.

PART III

Human Relations

CHAPTER XI

THE SPECIALIST IN BRITISH SOCIETY

We have now seen that the nineteenth century was a period of social mutation. Starting in Britain, a process, which has since involved every continent, disintegrated a pattern of life which had predominated since the beginning of settled communities. From the Neolithic Revolution, which started somewhere in the Near East ten thousand years ago, till the end of the eighteenth century of our own era, the prevailing mode of production common to successive civilizations was *domestic*. The home was not merely a unit of self-propagation. It was a unit of production, alike for production of food and for production of manufactured commodities. To be sure, the day's work in the Homeland of two hundred years ago was not all homework. There were mines. There was navigation. There was commerce Still, mining, navigation and commerce were well-established human activities in the earliest civilization of which we have a written record; and the tempo at which the home relinquished its hold on the daily work of mankind during the last two centuries eclipses that of any large-scale social innovation during the two preceding millennia.

This rapid spread of the factory system was the offspring of technical innovations which threatened the home as a unit of social organization in several ways. It coincided with vast improvements of human communications of all kinds Human life was becoming vastly mobile. With this gain of mobility consequent on the invasion of daily life by unprecedented facilities for rapid transport, social ties which bound the individual to the home and the home to the locality were in process of dissolution Such loosening of social ties itself synchronized with circumstances which cast aside pre-existing social barriers, promoting new solidarities and new groups within the community. One phenomenon which impressed itself inescapably on the imagination of the onlooker, from Adam Smith to Karl Marx, was increasing division of labour, seemingly tending to the disappearance of specialization, though, as we now see, generating a mighty array of new specialities Another, equally characteristic of the impact of the factory system on human relations, was rapid urbanization with concomitant emergence of a new awareness of common needs and common dangers transcending traditional obstacles to human co-operation. To assess aright the net effect of forces, some tending to greater coherence of the social group, others to greater diversity of social stratification, will be our task in the next few chapters.

When Chaucer's pilgrims made their way to Canterbury and Piers Plowman contemplated the rural scene from the Malvern Hills, the class structure of England was comparatively simple. As we learned the story in our schooldays, English society consisted of lords and commons, of gentlemen and labourers. The barons held their land of the King in return for services. Below them were lesser people—freemen, villeins and cottars, whose lot in life was fixed by the inexorable accident of birth; and this stratification of society was accepted as inevitable and desirable.

"God has ordained," says Chaucer's Parson, "that some folk be more high in estate and in degree, and some folk more low, and that everyone should be served in his estate and in his degree"

There were traditionally three "estates" or social classes—Lords Spiritual, Lords Temporal and Commons, but for practical purposes we may group the first two together. Thus society was made up of two major classes, one small, select and wealthy—the lords of land whether lay or clerical—and the other large—the ordinary folk of the countryside and the towns. It was an axiom that these classes were divinely ordained, each with its privileges, each with its responsibilities. The landlord was indeed privileged in holding land and in having some say in the government of his country, but he also had responsibilities It was his ostensible duty to protect the common folk of his estate from violence, to dispense justice and to maintain order.

This schoolbook picture of medieval society requires qualification in more ways than one. There were wide differences in social and political status within each group, but especially within the landed "estate." Some lords exercised sway over vast areas of the country, and might indeed be rivals to the King himself. Others were small people with possessions not exceeding a few hundred acres In short, the personnel of the landed estate extended at one extreme from earls and barons to knights and ordinary freemen at the other. We now know that trade and commerce were far more important in medieval times than used to be commonly supposed. The nobleman who invested heavily in trade and the wealthy merchant of humble origin were conspiring to undermine the simple view of society set forth by Chaucer's parson. Still, it remains broadly a truism that there was little movement from class to class throughout the period. The villein might become a copyholder or a freeman He might move into a town and become a craftsman, but he moved within a very limited range, recognizing the social and political superiority of the landed aristocracy and accepting their view that it was their function to govern.

Such a conception of society persisted for many centuries. Indeed there are traces of it alive to this day, especially in country districts where landed families still occupy a unique position in social organization Though the function of government, of maintaining order and of dispensing justice has long since passed into the hands of county councils, police force and law courts, landed families, shorn of their powers, still retain something of the prestige of their ancient glory. Changed economic circumstances often bring the old country seat, depository of centuries of tradition and culture, under

the hammer. It becomes a hostel or a hotel or a college for adult education; but possession of land still ranks high and country folk still doff caps to the lord of the manor, now a prosperous business man who has bought a country seat, or it maybe the grandchild of one.

THE MIDDLE CLASS

In the sixteenth and seventeenth centuries England and Scotland found ways of modifying their social arrangements to admit to a share in government a new social group. It was a middle class which derived its wealth and importance from trade. In so far as the wealthy wool merchant or the cloth manufacturer entered the ranks of the aristocracy and members of the aristocracy themselves invested in trade, English social structure had an elasticity which was not characteristic of that of France or Spain. There are several reasons for this. Capitalism was more firmly entrenched in Britain in the sixteenth and seventeenth centuries than anywhere on the Continent. It had shown unrivalled vitality and was capable of vast expansion. Partly owing to its own momentum it created a place for itself in the body politic which could not be challenged. Its very strength enabled it to modify the political and juristic make-up of the country in its own interest.

In an age of fierce nationalism there was no king who was not prepared to accept the current maxims of absolute power embodied in the Roman Law and taught by the learned jurists of the Renaissance. The merchant class threw its weight on the side of the King in the struggle that ended feudalism and established a strong national state; but they had no disposition to create a tyranny hostile to the interests of capitalism. The Renaissance, however, stimulated an interest in Roman Law on the Continent and in England the Privy Council sought without success to introduce it; but Englishmen had never shown great enthusiasm for Roman Law with its emphasis on centralization and absolutism. They had blundered into a more flexible legal system by creating out of customs and precedents what came to be known as the Common Law, and they stood by it. The middle class disliked an absolutism likely to cramp commercial expansion and check economic endeavour. Already in Tudor times there was uneasiness over extension of the judicial powers of the Council with its prerogative courts like the Star Chamber and the Councils of Wales and the North. Before the death of Elizabeth there was fierce antagonism between the prerogative courts of the Crown and the courts of the Common Law. The feud went on in the seventeenth century and constituted one of the main bones of contention between King and Parliament In accordance with Roman principles, the former held that the will of the Prince was the source of law. The latter urged that law had an existence independent of the monarch, alterable only by Parliament. The issue was never seriously in doubt. In 1641 the last of the prerogative courts was abolished, and the Revolution of 1688 consummated the triumph of the new mercantile classes.

The victory of the Common Law contributed in no small measure to the flexibility of English social structure. Henceforth class differences were based on economic as opposed to *juristic* grounds. In France, where no

such change took place, a mercantile class had grown apace in power and influence since the days of Colbert; but the rigidity of the legal and political system excluded them from a share in the government of the country, and the deep cleavage between the aristocratic order and the "third estate" ended only in Revolution. Other events which took place long before this supply a further reason for the easy admission of a middle class into the body *politic* of England, which had been the seat of an economic revolution peculiar to itself in the sixteenth century. The growth of the woollen industry offered special opportunities of gain to merchant and landowner alike. When the latter found their incomes threatened by rising prices following the influx of bullion from the New World (p. 33), they came to terms with the commercial spirit and reaped good returns from the conversion of broad acres into pasture lands. When the dissolution of the monasteries created a wave of speculation in landed property, wealthy merchants were not slow to seize an opportunity of good investment, at the same time enhancing their prestige by becoming landed proprietors. A process started in the days of the enclosure movement of the sixteenth century gained momentum when the Civil War drove many landowners into bankruptcy. The fusion of two classes was consummated by inter-marriages, which swept aside the last barriers of social caste.

There was now no fundamental division of interest between the older landed aristocracy and the new middle class of merchants Even in Elizabeth's reign the wealthy merchant was finding his way into the councils of State Aristocrat and merchant alike had interests in industry and commerce. Queen Elizabeth herself took shares in trading ventures to Africa, as well as in Frobisher's voyages, and it is reputed that she was financially interested in Drake's voyages (See W. R. Scott, *Joint Stock Companies*, i, 75, 80 ff) In the list of shareholders in the important Mines Royal Company, 1580, we find the names of Lord Burghley, the Earls of Pembroke and Leicester, the Lord Mountjoy, as well as others more directly concerned with trade *

This comparatively easy access of the more prosperous and influential members of the merchant class into the ranks of the aristocracy prevented any violent conflict between the bourgeoisie and the landed classes in England Doubtless this infiltration of a new and vigorous element into the more conservative class tended to broaden its basis and widen its beliefs. On the whole, however, the newcomers assimilated the outlook of the larger class with little modification. So faith in the social and intellectual superiority of the upper class remained unshaken, their prestige and political importance strengthened. The wealthy merchant did not storm the citadel of privilege. He sought entry by purchase of an estate, by marriage, or by winning a peerage, so taking his seat in the House of Lords side by side with those whose society he coveted eagerly. We get a view of the social structure of England and Wales before the coming of power-production in Gregory King's analysis made in 1688. At that time, it will be observed, the mass of the people were engaged in agriculture, and though there were differences of economic condition and of social status between the large freeholder and

* Appendix IV, *English Brass and Copper Industries*, H. Hamilton, 1926.

the cottager, the broad distinction was between landowner and squire, on the one hand, and peasantry on the other.

No. of Families	Ranks, Degrees, Titles and Qualifications	Heads per Family	No of Persons	Yearly Income per Family
				£
160	Temporal lords	40	6,400	3,200
26	Spiritual lords	20	520	1,300
800	Baronets	16	12,800	880
600	Knights	13	7,800	650
3,000	Esquires	10	30,000	450
12,000	Gentlemen	8	96,000	280
5,000	Persons in greater offices and places	8	40,000	240
5,000	Persons in lesser offices and places	6	30,000	120
2,000	Eminent merchants and traders by sea	8	16,000	400
8,000	Lesser merchants and traders by sea	6	48,000	198
10,000	Persons in the law	7	70,000	154
2,000	Eminent clergymen	6	12,000	72
8,000	Lesser clergymen	5	40,000	50
40,000	Freeholders of the better sort	7	280,000	91
120,000	Freeholders of the lesser sort	5½	660,000	55
150,000	Farmers	5	750,000	42.10s.
15,000	Persons in liberal arts and sciences	5	75,000	60
50,000	Shopkeepers and tradesmen	4½	225,000	45
60,000	Artisans and handicrafts	4	240,000	38
5,000	Naval officers	4	20,000	80
4,000	Military officers	4	16,000	60
50,000	Common seamen	3	150,000	20
364,000	Labouring people and out-servants	3½	1,275,000	15
400,000	Cottagers and paupers	3	1,300,000	6.10s.
35,000	Common soldiers	2	70,000	14
	Vagrants, as gipsies, thieves, beggars, etc		30,000	
	Total		5,500,520	

THE PROFESSIONS

In early times the professions of law, divinity and medicine were closely identified with the Roman Catholic Church. Though not originally founded by the Church, the universities quickly came under its domination, until every student was in fact a clerk and preferment in any profession, whether civil service, teaching or medicine, depended on position in the Church. "To the great mass of the younger students the University was simply the door to professional life," says Rashdall. Civil servants, physicians and ecclesiastical lawyers sought a position in the Church which would enable them to practise their profession. From the point of view of the King it was cheaper to appoint a civil servant or a physician to a benefice than to pay him an adequate salary out of his own pocket. The alliance between teaching and the Church was very close, and remained so until quite recent times. For

instance, in the nineteenth century Fellows of Oxford Colleges had to be in Holy Orders. The general view in Scotland was that a University Principal should be a divine

The great social and economic movements of the fifteenth and sixteenth centuries had a profound influence on the old professions and gave rise to new ones The chief characteristic of this age, as we have seen, was the rise to economic and political importance of the class engaged in commerce and industry, the bourgeoisie or middle class. This class had not only a new outlook on social affairs but new needs. The rigid medieval framework of society had to give way to something freer and more in keeping with the spirit of the age. This involved the breakdown of medieval monopolies and restrictions. It also meant an end to the control of economic life by the Church Catholic. Thus the Reformation had its roots deep in the social and economic life of the times. The Church had to withdraw from a large terrain of its traditional sphere of influence. As it withdrew, professions, hitherto dependent on its sanction, emerged independent and free. The chief offices of State were gradually wrested from the Church. By Elizabethan days they had come to be filled by laymen whose minds and interests were more attuned to the strenuous commercial life of the towns

The professions of medicine and law were also transformed by the social, intellectual and economic movements of the time Out of touch as it was with everyday problems of life, the former had made little progress in medieval days. An impulse to advancement came from the wider interests and the keener intellectual atmosphere of an age which witnessed the discovery of America and an efflorescence of capitalist enterprise The chain which bound medicine to the Church was gradually broken. An important milestone was 1518, when the Royal College of Physicians was founded, but it was some time after this before medicine was finally freed from ecclesiastical control. Law, too, was being influenced by the forces which were creating the modern world. Long before the Reformation, however, the common lawyers were completely divorced from the Church The Inns of Court were functioning as independent secular bodies in the early fifteenth century. As the dominion of the Church contracted and its sphere of influence declined, the canon lawyers naturally found their work dwindling Civil Law, studied at Universities mainly by clerks with a civil service career in view, also suffered an eclipse as the work of the Reformation proceeded. By the sixteenth century, say Carr-Saunders and Wilson,* "the already secularized common lawyers came to represent almost the whole body of lawyers."

This new social and intellectual order also created new demands for professional services. Break-down of the medieval land system and substitution of capitalist farming in some parts of the country, involved transference of land, and therefore demand for the services of notaries and *scriveners* skilled in the drafting of deeds. Moreover, expansion of trade and creation of wealth called for drafting of deeds of co-partnership or preparation of wills, conveyances and the like From being a mere amanuensis, the scrivener became legal adviser in a period of economic flux. Being in touch with people who wished to transfer property, make wills or form business partnerships,

* *The Professions*, 1933, p. 293.

he was in a strong position to act as financial middleman, bringing together lender and borrower. By use of their own capital, the more prosperous ones became money lenders. Doubtless, some received deposits from customers and in turn loaned them at interest to those in need of ready cash. The scriveners were therefore pioneers in the profession of banking. (*See* p. 221.)

RELIGIOUS TESTS AND SOCIAL RECRUITMENT

For upwards of two hundred years social recruitment in England was profoundly affected by the enforcement of religious tests on those seeking public office or university education. By a series of laws passed in the Restoration period, those willing to subscribe to the Anglican faith had special favours Heavy disabilities were heaped on Quakers and Nonconformists as well as on Jews and Roman Catholics. For instance, the Five Mile Act forbade any Nonconformist minister from coming within five miles of any corporate town, and since most dissenters lived in the towns, the loss inflicted was immense. This wave of intolerance and persecution marked a violent reaction from the freedom enjoyed by all religious sects during the Commonwealth. The Puritan Revolution had been a challenge to the old order For a time it signalized triumph for the commercial classes and for those of the Puritan faith, including Quakers and other nonconformists. Even the Jews, who had either avoided England altogether or had slipped in unobtrusively for two centuries after their expulsion by Edward I, now benefited from the growth of toleration. After 1655 there was no legal bar to their return to England. They were too valuable for their trade connections, as for instance with Spain and Portugal, and because of their business acumen. "I meddle not with any man's conscience," was the proud boast of Cromwell Cromwell was in advance of the majority of his fellow countrymen. While he was prepared to grant the widest toleration, there were many who were not averse to persecution. Then as now it was easy to arouse hostility to the Jews.

Had the spirit of toleration been maintained the avenue of advancement to professional and public life would have been broad and English life would have been enriched beyond measure; but the Restoration of the monarchy in 1660 initiated a violent reaction. The pendulum swung in the opposite direction. Parliament and the squires, determined to repay old scores, insisted on a fierce religious persecution. Intolerance replaced tolerance. Numerous disabilities were placed on dissenters. Persecution of Quaker and other nonconformists was the fashion. The main importance of these Acts, called the Clarendon Code, as Professor G. N. Clark points out, lies not in the persecution but in the great social change they effected. "They assumed," he says, "that in religion England was now to be divided. The Church of England was to be purged of fanatics and heretics by oaths and subscriptions." English society was now divided into "church" and "chapel," a division which ran through politics, the press and economic life as well, and lasted for upwards of two hundred years.

In short, dissenters were excluded from public life as well as from the universities. Denied all opportunities of entering politics or the professions,

they naturally gravitated to industry and commerce where they found abundant scope for their highest abilities Hard work and thrift, perseverance and sobriety, qualities inculcated by their religious beliefs were just the qualities most favourable to business success. Capitalist enterprise and religious nonconformity were thus closely associated; and the iron industry of the eighteenth century affords abundant proof of this close alliance. "The very names of the ironmasters," writes Ashton, "are redolent of the Old Testament and imply for those who bore them a Puritan parentage" At the end of the seventeenth century there were signs of a more lenient attitude A Toleration Act, which with certain limitations granted the right of worship to Protestant nonconformists, was passed in 1689 The Corporation and Test Acts, though not repealed, were less rigorously enforced. Nevertheless opposition to complete toleration was strong, and religious tests were fully maintained till well into the nineteenth century. People unwilling to take the Communion according to the rites of the Church of England were still debarred from taking public office under either the Crown or the municipalities, and they were rigorously excluded from the universities.

"At Oxford," says Woodward, "no one could matriculate without subscribing to the thirty-nine articles, at Cambridge nonconformists might become members of the university, but they had not access to scholarships, fellowships or university degrees The universities were the training-places of the anglican clergy; each college had its chapel, at which attendance was compulsory, and the endowments of religion could not easily be separated from those of learning." (*The Age of Reform*, p. 471)

The Church fought hard to maintain the exclusion of nonconformists and it was not until 1871 that religious tests were completely and finally abolished.

The effect of this long period of university exclusiveness on English social life could not but have the most profound consequences. The exclusiveness of the two medieval English universities (Oxford and Cambridge) helped to establish the intellectual dominance of the Scots in British life North of the Border the Clarendon Code and the Test Act had no currency. It is true that a Test Act had been passed by the Scots Parliament in 1681, but it was designed to consolidate presbyterianism which was the national religion of Scotland. All persons in public office were required to subscribe to "the true Protestant religion" as contained in the Confession of Faith, recorded in the first parliament of James VI in 1568; disabilities were imposed on Roman Catholics and on Episcopalians, but no large vigorous section of the community, like the English nonconformists, was excluded from social and educational opportunities. Throughout the eighteenth and nineteenth centuries when Oxford and Cambridge were closed to nonconformists, Scottish universities were able to pursue their cultural work unhampered to any appreciable extent by restrictions imposed by religious tests. The result was profound. More in contact with the social forces of the time, the Scottish universities soon became famous for their work in medicine and science. Edinburgh and Glasgow especially sent their doctors south to England to play a distinguished part in great medical advances then taking place, with far-reaching consequences for the health of the population

The efflorescence of Scottish education two centuries before England, was encouraged by two circumstances. One was her close commercial and cultural ties with Holland, the foremost centre of capitalist civilization in the seventeenth century. The other was the opportunity of expansion offered by the Union of 1707 which made her a partner in England's overseas empire. Scotland had been a poor country, weak in natural resources and afflicted by an unpropitious climate. The standard of living of her people was extremely low and her methods of farming and manufacturing were primitive. All this had been accepted as inevitable. Poor harvests, famine and disease were dispensations of Providence. No one imagined it could be due to inefficiency or ignorance. Since economic pursuits did not arouse controversy or call for discussion, religious questions loomed large. The presbyterian form of church government with its democratic tendencies encouraged discussion and religion offered a perennial theme. Theological disputation was common in every parish and in every hamlet. For thirty years before the Union, however, there were signs that a new era was opening. Scotsmen were busily engaged in developing new industries, such as coal mining and textile manufacture, to mention but a few. They were engaging in trade with America and they were beginning to play a part in the scientific movement of the times. By offering great opportunities for enterprise both at home and overseas, the Union of 1707 stimulated these innovations.

For a time there was hardship to bear. Union with England called for considerable readjustment of Scottish economic, social and political life, but the initial phase of difficulty had been overcome long before the rising of '45, and Scotsmen were showing much evidence of their capacity to trade with the colonies, to improve their farming and industrial methods, and to develop their universities Religious disputations came to occupy a smaller and smaller place. The horrors of persecution and witchcraft, kept alive so long by a church which claimed unswerving obedience and loyalty from its members, silently came to an end. Stimulated by the opportunities now before her, Scotland became a recruiting ground for doctors and teachers, for colonists and administrators in many fields of activity. This revolution in behaviour is remarkable. In the seventeenth century witch-burning and the most dreadful tortures were common, imposed not by an ignorant mob but by educated judges and ministers. By 1750 Scotsmen were already establishing themselves in places of influence and importance at home and in the colonies Before 1700 they had an unenviable record of intolerance and bigotry Within a century they had established a high reputation for culture and humane administration Neither the one nor the other was primarily a product of national temperament. Each was a result of the system, social and religious, which prevailed at the time; and what is true of Scotland may well be true of those peculiarities of any other social group for which the exponents of Racialism—be it called *Rassenhygiene* or Eugenics—offer quasibiological explanations.

RECRUITMENT OF EMPLOYERS IN THE INDUSTRIAL REVOLUTION

In the first phase of the industrial revolution a high proportion of employers rose from the ranks. "Most of the successful men in the (iron) industry," says Ashton,* "entered it from the secondary metal traders—successful craftsmen seeking control over the sources of their raw material—or from the merchanting of iron and steel wares. There were, of course, many exceptions. Andrew Yarranton was originally a linen-draper's assistant; John Pemberton came of a family of goldsmiths; Charles Lloyd was a farmer; John Roebuck a doctor of medicine; Joseph Dawson a minister of religion, and Samuel Walker a schoolmaster. But that the generalization laid down is true of the body of ironmasters is incontrovertible. Henry Darby, the father of the first Abraham, was a locksmith, and Abraham himself was, for a time, a maker of malt-mills. Aaron Walker was a nailer; William Hawks, of Newcastle, and John Parker of Staffordshire began their industrial life as blacksmiths, Peter Stubs, the founder of the well-known firm at Rotherham, was originally a filemaker and innkeeper at Warrington; Spencer, who held Barnby Furnace in Yorkshire, began as a maker of hay-rakes, and George Newton of Thorncliffe was a maker of spades and shovels, who was drawn to iron production by the high price of the material with which he had to work."

To raise oneself from the rank of craftsman or small merchant to that of ironmaster was no easy matter, calling for grit, determination and ruthlessness, with no inconsiderable measure of good luck Not everyone possesses such qualities, or is fortunate enough to acquire control over the necessary capital. Samuel Garbett, the chief founder of the famous Carron Iron Works in Scotland in 1759, started life as a brass worker in Birmingham By force of character he rose to be an influential industrialist with interests in brass manufacture, copper mining and smelting, and iron production Garbett's works were the parent of several others set up by men who had risen to managerial posts at Carron. Generally they had as partners merchants interested in the sale of iron products, or landowners interested in the exploitation of the mineral resources of their estates. Sometimes industrial enterprise drew its personnel and its capital from commerce. Many of the tobacco lords of Glasgow started in a small way by shipping tobacco from America. By the purchase of plantations, they then became influential merchants and large capitalists. On their return to Glasgow some acquired estates and so added social prestige to their wealth. Others, like the Dunlops who purchased the important Clyde Iron Works near Glasgow, invested their money in industry.†

One might name innumerable firms founded by craftsmen or merchants, sometimes in association with local people who advanced capital but took no active part in the business. Scott's shipbuilding yard at Greenock, which flourishes today after two hundred years of active service, sprang from the small boat-building yard of John Scott, founder of the firm in the early

* *Iron and Steel in the Industrial Revolution*, p 209

† *Curiosities of Glasgow Citizenship*, by George Stewart, Glasgow, 1881.

days of the eighteenth century.* Many founders of cotton spinning mills commenced as hand-loom weavers or as drapers. When the craft of engineering was not as yet born, these pioneers of factory production had to secure millwrights and others to make their machines before starting to manufacture. Robert Owen, famous as the owner of the New Lanark Mills in Scotland, tells of his debut as an industrialist in his own words:

> "Jones and I had agreed," he says, "with a builder that he should erect and let to us a large machine workshop, with rooms also for some cotton spinners. . . . We had shortly about forty men at work to make machines, and we obtained wood, iron, and brass, for their construction upon credit. . . We made what are technically called 'mules' for spinning cotton, sold them, and appeared to be carrying on a good business "†

David Dale, predecessor of Owen at New Lanark and owner of several cotton mills in Scotland, started life as a hand-loom weaver. Later he became an importer of yarn and employer of numerous hand-loom weavers, and finally a captain of industry.

During the first phase of industrialism in Britain there were opportunities in plenty for men of talent and enterprise to rise from humble beginnings to positions of great influence. To an even greater extent, this has also been the experience of the United States, because America has been unhampered by class traditions of wealth and prestige which complicate social relations in the Homeland. It has also been the experience of Russia in our own day. According to Mantoux, the phase when craftsmen could easily rise to be employers had come to an end in Britain by about 1830. Partly due to increased employment of capital and partly to undoubted advantages possessed by those who had already established themselves, the more important manufacturers tended to be recruited from the middle class. Employers and wage-earners were separated by a barrier, impassable except to the fortunate and highly gifted.

As every year passed the capital requirements of industry rose far beyond the capacity of the individual or the small group of partners. So the joint stock or company system became general. By now the possibility of the average workman rising to the rank of employer was altogether trivial. The fact that some men reached the highest rung of the ladder simply shows that barriers can be overcome by exceptionally able men if helped out by exceptional luck and exceptional opportunity. It certainly does not prove that the way is open to anyone with capacity and ability. The industrial ladder is slender, and the number of wage-earners is very large in proportion to the numbers reaching the employer grade. There are exceptional industries, notably, among the large ones, cotton.‡ It has been estimated that 76 per cent of weaving employers in 1912, 73 per cent of spinning mill directors, and 84 per cent of spinning mill managers in the same year were originally wage-earners; but this does not mean that the mass of wage-earners can

* *Two Centuries of Shipbuilding by the Scotts of Greenock*, 1906.

† *The Life of Robert Owen*, by Himself, 1920, 31–2.

‡ Chapman and Marquis, "Recruiting of the Employing Classes from the Ranks of Wage-earners in the Cotton Industry," *Journal of the Royal Statistical Society*, February 1912.

hope to be employers one day. In striking contrast with manufacturing industry is mining, which in the early days of industrialism drew capital and enterprise from the class whose fortunes were most intimately bound up with the land. Eager to benefit from the expansion of the demand for coal, landowners themselves engaged actively in mining enterprise, among others Lord Dudley in Staffordshire, the Duke of Devonshire in Derbyshire, the Earl of Gower in Shropshire, the Duke of Argyll, the Duke of Hamilton and the Earl of Mar, the Duke of Buccleugh, and Lord Dundonald in Scotland.

Instead of working their minerals directly or through salaried agents, some owners leased them. The lessees were sometimes drawn from landed families. More generally they were ironmasters interested in the supply of raw material to their furnaces, or farmers interested in obtaining coal for lime-burning. John Barnes of Barlow in Derbyshire, for instance, a freeholder of about seventy acres, obtained a lease of a small colliery in 1763, and so established an association with the coal industry which his descendants have carried on to the present day. In Scotland, Alexander Baird, farmer, in the parish of New Monkland, leased coal mines in the early nineteenth century, and thereby laid the foundations of the mammoth iron business established by his sons at Gartsherrie The Church, being a large land-owner, also had an interest in mining royalties. In Durham, more especially, clergymen often worked their glebes for coal or joined with others to prosecute mining in their parish.

"In Restoration times," say Ashton and Sykes (*The Coal Industry of the Eighteenth Century*, 4), "a curate of Beeston, near Leeds, 'a man of rough manners, great resolution and much personal strength' forsook the cure of souls to become the manager of a coal-mine: and a hundred years later Joseph Dawson, an Independent minister, who was in the habit of paying wages to his colliers on Sunday morning before he entered the pulpit, became the chief partner in one of the largest coal and iron concerns in the West Riding"

In the course of a century most landowners gave up working their minerals direct, and control passed into the hands of joint stock companies. Sometimes they continued to take an active interest in the industry as directors or chairmen More often they were content to remain passive, collecting their royalties, defending at all times their right to do so, and throwing their weight on the side of the coal masters in the House of Lords. The miners themselves, once the aristocracy of labour, were now the most under-privileged class of worker in the country In eighteenth-century Scotland they were serfs tied to the pit where they were born and doomed to spend a life of unremitting toil in the service of the owner who claimed jurisdiction over them. Ostracized by other workers who regarded them as an inferior and brutalized race of men, the miners lived in villages isolated from the rest of society. The industry was recruited from their own sons and daughters. "The coal-miners of the eighteenth century formed, indeed, an hereditary caste almost as exclusive as that of the owners of mineral rights"* The gulf that separated them from other classes of workers was unbridgeable

* Ashton and Sykes, p. 155.

They suffered cruelly under the lash of economic and social conditions which they were powerless to control; but no class of worker was so conscious of its common interests or so willing to sacrifice everything when its members were in danger.

THE VICTORIAN MAN OF PROPERTY

Recruitment of the managerial and employing classes from the ranks is one of the noteworthy features of the early phase of industrialism. It explains the swiftness with which many firms rose from insignificance to importance, managed and directed by men whose lives were dedicated to the business, inspired by fanatical faith in their own powers and in the beneficence of gruelling toil and grinding thrift. Early struggles coloured their social outlook and cast their minds in a narrow mould. Having outstripped their fellows, they were hard employers, claiming autocratic powers over the industries they had helped to create. Their own experience and their cramped interests fitted them ill for the role of master of the fate of their workpeople. Doubtless some of them led extravagant lives and built mansions in which to play at being aristocrats; but most were content to devote themselves body and soul to business What profits they made, some in a short time, might well have been sufficient to endow them in idleness for the rest of their days, but a life of indolence and luxury was anathema to the Victorian industrialist. Profits must needs go back into industry to finance expansion, to widen its basis and to increase its influence and power in world markets.

In spite of the rise of a new manufacturing class to a position of economic and social importance, the distribution of social power continued to have no intelligible relation to basic human needs The prestige of land holding remained wellnigh as great as ever, and brought to those concerned an influence in national and local affairs out of all proportion to their social function in this age of machine-production and industrialism. A centuries-old view of the place of a land-owning aristocracy in society persisted, readily accepted by recruits now so swiftly enrolled in its ranks, and the plausibility of the traditional view gained strength from the active role played by landowners in the reform of farming technique. The agrarian revolution gave them the means of increasing their fortunes and beautifying their estates, but their reaction to the tocsin of Liberty, Equality and Fraternity was to entrench themselves more firmly in their privileged position. The French Revolution was a challenge to the old order. The landowning class met it by consolidating their position in society and driving underground the reform movement, which, in part, drew its inspiration from across the Channel. (*See* pp. 292–4.)

The abolition of privilege and the levelling of classes was hateful to the English aristocrat who viewed with dismay a movement which undermined the conception of well-recognized classes. Though differences between classes were economic and not juristic as in France and Germany, British political thought accepted a hierarchical social order without question, in which the propertied class were the depository of authority and power in the State, the "lower orders" being properly content to accept their more

lowly lot without demur. As yet, education was not for the working class. It might make them question the "lowly path which had been allotted to them by the hand of God." In the House of Commons, Giddy, then President of the Royal Society, stated the case for current social beliefs when he opposed education for the working classes in the following terms:

"However specious in theory the project might be," he said, "of giving education to the labouring classes of the poor, it would, in effect, be found to be prejudicial to their morals and happiness: it would teach them to despise their lot in life, instead of making them good servants in agriculture, and other laborious employments to which their rank in society had destined them; instead of teaching them subordination, it would render them factious and refractory, as was evident in the manufacturing counties, it would enable them to read seditious pamphlets, vicious books, and publications against Christianity; it would render them insolent to their superiors, and in a few years, the result would be that the legislature would find it necessary to direct the strong arm of power towards them, and to furnish the executive magistrate with much more vigorous laws than were now in force " (Hansard, ix, 798)

A view of society, which had its roots in earlier centuries, thus lingered on in the Victorian era, blended with the creed of economic individualism and the gospel of hard work. In the process, it was admittedly mellowed by the democratic tendencies of the age. On the one hand, the manufacturing class, now sufficiently important to overshadow the older landed aristocracy, proclaimed the virtues of self-help, industry and thrift, together with the benefits of private competition. Advancement, as they argued, was open to all who had ability and capacity for work and saving. The lower orders had only themselves to thank for their humble lot. Such a dogma, combining the lethargy of the slave-owning classes in an earlier civilization with the brisk individualism of the early machine age, would have been intolerable had the new manufacturing class, waxing wealthy as the factories and the furnaces of Britain poured forth an ever-increasing flow of products, lived idle and extravagant lives The economic system of Victorian days, says J. M. Keynes,

"depended for its growth on a double bluff or deception. On the one hand the labouring classes accepted from ignorance or powerlessness, or were compelled, persuaded, or cajoled by custom, convention, authority, and the well-established order of Society into accepting, a situation in which they could call their own very little of the cake, that they and Nature and the capitalists were co-operating to produce. And on the other hand the capitalist classes were allowed to call the best part of the cake theirs and were theoretically free to consume it, on the tacit underlying condition that they consumed very little of it in practice. The duty of 'saving' became nine-tenths of virtue and the growth of the cake the object of true religion. There grew round the non-consumption of the cake all those instincts of puritanism which in other ages has withdrawn itself from the world and has neglected the arts of production as well as those of enjoyment. And so the cake increased, but to what end was not clearly contemplated.' " (*The Economic Consequences of the Peace*, 1920, 17.)

Because so many of the leaders had risen from the ranks, the faith of the Victorian man of property, the faith that ability would always find its own

level and that those who remained on the lower rungs of the ladder would receive the awards that were their due, had indeed some basis in fact. The wealth they had acquired was, in their view, society's reward for their perseverance and their services. In their view, also, this state of affairs bore favourable comparison with that of an earlier age when social position was due solely to birth, and wealth largely to inheritance. In reality, a system which offered such dazzling prizes to anyone who could seize them was rapidly deepening inequalities of circumstance and wealth, meanwhile restricting the opportunities of many to rise. Landed families, enriched both by rising land values as urbanization proceeded and by successful incursions into finance or industry, thus came through the industrial revolution fortified and strengthened. They were joined by families which had gained their wealth from industry in the course of a few generations. By marriage, by good luck and by successful enterprise, fortunes multiplied and inequalities intensified. As generation succeeded generation, inheritance perpetuated and intensified these inequalities. In a recent investigation into "The Influence of Inheritance on the Distribution of Wealth,* Wedgwood comes to the following "provisional and indefinite" conclusions:

> "In this country at any rate," he says, "the larger fortunes are left, in the great majority of cases, by those who received the larger inheritances; that rich persons, who have not received any considerable portion of their property by way of inheritance, gift or marriage, are a minority of their class, and that unequal amounts acquired by industry and saving are closely related to unequal inheritances"

INDUSTRIALISM AND THE PROFESSIONS

Until the nineteenth century, according to popular belief, there were but three professions—"divinity, law and physic." Being closely bound up with the Church, teaching was included in the profession of divinity. Yet the numerous professions which have appeared since the Industrial Revolution had their roots in the social and intellectual developments of the previous two centuries. The story of their history is closely related to the progress of science and technology in the seventeenth and eighteenth centuries.

In an age of spinning-wheels and hand-looms and traditional methods of cultivation, society made few demands on men with special intellectual accomplishments. Lawyers and ministers, doctors and teachers, were all society seemed to require, and even they were influenced by the rule of thumb methods which were accepted as the basis of practice in every occupation. An awakening interest in inquiry and experiment that marks the Elizabethan and Stuart age, growth of population, and increasing demands of society for goods and services, turned men's minds to new methods of farming and new ways of manufacture. Slowly and painfully they built up knowledge of botany and plant life as they tilled their fields, or of metallurgy, as they experimented in their furnaces with coal instead of with wood. Attracted by the practical problems that faced mankind, those with greater intellectual attainments and more certain scientific knowledge devoted

* *Economic Journal*, xxxviii, 55, March 1928.

themselves to the study of everyday problems thrown up by the economic system.

The founding of the Royal Society in 1662 well illustrates the happy alliance of science and practical affairs; and the new spirit of inquiry infected every department of the economic system. Agricultural chemistry is not, as we are apt to think, an essentially new professional pursuit. As long ago as 1723 the Scottish Society of Improvers urged that agriculture should be studied "in a university way" and that chairs of agriculture should be founded in our universities. Within the next half-century or little more, Dr. Roebuck, a medical graduate of Edinburgh with many industrial interests, was busy studying the chemistry of metallurgy in Birmingham, Alexander Keir, also a medical graduate of Edinburgh, had founded a factory for making synthetic alkali at Tipton in Staffordshire, and Henry Home, Professor of Materia Medica at Edinburgh University, was investigating the scientific problem of bleaching.

Power production with its factories, its large capitals and its industrial towns, was thus the outcome of scientific effort extending over the previous two centuries, and its triumph in the Victorian age was conditioned by the forward march of science, which drew its inspiration from the practical tasks of the times. The new industries required metallurgists, chemists and engineers. Large-scale business required organizers and professional managers. Intricate financial operations required accountants, company secretaries, insurance experts, actuaries and bankers. New means of transport required civil engineers to build bridges and harbours, to plan canals and railways; and the new towns cried out for physicians and surgeons, chemists and dentists, sanitary engineers and architects. All this called for a highly developed educational system and an efficient national and local civil service. The rise of the new professions* and the expansion of the old is the direct outcome of fundamental changes in the economic and social structure of society associated with the adoption of power technology and mass production.

THE ENGINEERS

Before 1880 civil engineers—builders of roads, bridges, canals, harbours and lighthouses—had already established themselves as a profession in which there was no easy path to competence, for there were no training facilities such as existed at a later date. It was a profession which grew up in day-to-day contact with practical problems. The great men, such as Smeaton and Rennie, Telford and James Watt, were self-taught, exploring their way through a maze of unsolved problems, gradually acquiring knowledge which they passed on to their assistants and apprentices in their workshops and offices. Starting in millwrights' shops, the cradle of the profession, many of them "were borne up by the force of their practical skill and constructive genius into the highest rank of skilled and scientific engineering," says Smiles (*Lives of the Engineers*, 1861, i, 312). Brindley, the famous canal builder, who could scarcely read or write, began in this way. So, too, did Fairbairn, engineer and shipbuilder. The great Telford was apprenticed to

* This is the subject of A. M. Carr-Saunders' and P. A. Wilson's important book, *The Professions*, to which the present writer is much indebted.

the mason's craft and thence, by way of architecture in Edinburgh and London, he turned to road, canal and harbour building (Fig. 50).

Men engaged in the great engineering works of the time were not slow to appreciate their common interests. In 1771 a proposal was made to Smeaton, the harbour engineer and builder of the third Eddystone Lighthouse (1756–9), "that it would be well, if some sort of occasional meeting, in a friendly way, was to be held . . that thus the sharp edges of their minds might be rubbed off, as it were, by a close communication of ideas, no ways naturally hostile; might promote the true end of public business upon which they should happen to meet in the course of their employment." The outcome was the founding of the Society of Civil Engineers. Unlike their military predecessors, whose work lay in building forts and trenches, the new engineers were concerned with the constructive work of peaceful industry and commerce, hence their designation as *civil*. The society has survived to the present day under the title of the Smeatonian Society of Civil Engineers. Including within its membership only those who had reached the top of their profession, the Society was too exclusive to satisfy the needs of the whole profession of engineering. Every day its field of activity extended, as power production tightened its grip on industry and transport. Accordingly, the Institution of Civil Engineers was founded in 1818.

Hardly had the new Institution been founded when it was realized that one body could not adequately represent all aspects of the profession. Already the steam engine was conquering manufacturing industry, and its application to transport enormously widened the field of engineering In 1847 the Institution of Mechanical Engineers was founded with George Stephenson as its first President. In time other specialist organizations were founded The employment of marine engines raised new problems for shipbuilders—problems of design, of construction, of strength of materials and so on. As wood as a constructional material was displaced by iron and then by steel, the business of shipbuilding became a highly specialized branch of knowledge Its claim to independence was made when the Institution of Naval Architects was founded in 1860. The next great branch of engineering to become specialized was electrical engineering, whose institution was founded in 1871, when the profession which it represented was in its infancy. While interested in improving the social status of their members, the real significance of these institutions is that they stand for *professionalism* in industry. That is to say, all of them attempt to enforce *recognized qualifications* based on formal education and practical experience as a basis of employment. Interested in the advance of knowledge in their special spheres, they demand that society should utilize to the full scientific knowledge which they possess. They have thus stimulated universities to provide facilities for teaching and research in the subjects with which they are concerned

THE CHEMISTS

The rise of chemical industry is one of the notable features of the second half of the eighteenth century. Before this time chemicals used in industry were either natural deposits or waste materials Their production employed

"no technique which could not be included under the general term cookery." For instance, the alkali used for cleaning wool fibre was incinerated charcoal. Lime for cement was obtained by heating chalk. Numerous remains of lime kilns show how widespread was this process Saltpetre was prepared from the white crust on insanitary deposits.

"What distinguished chemical manufacture in the modern sense," says Hogben (*The Theoretical Leadership of Scottish Science in the English Industrial Revolution*), "is the deliberate search for substitutes based on discoveries made on a laboratory scale."

The impetus to chemical advance came from the demands of industry and agriculture. The scarcity of timber made urgent the discovery of alternative sources of alkali The problem of food production directed inquiry to the chemistry of the soil. The enormous time required in the bleaching of linen turned men's attention to the chemical processes involved The leaders in this scientific movement, as Hogben shows, were graduates of Scottish Universities. Black, Home, Roebuck, Keir and Hutton were all medical graduates of Edinburgh who happily combined theoretical investigation with a lively interest in practical problems. Black's association with James Watt is well known, Home was interested in the problems of agriculture and bleaching, Roebuck established a sulphuric acid works at Prestonpans, while Keir was at one time in partnership with Boulton the Birmingham manufacturer Before the close of the century, the importance of the chemist to industry was already established. He had shown how to manufacture sulphuric acid on a commercial scale, he had discovered bleaching powder which reduced bleaching from several months to a few days, he had shown how to manufacture coal gas, and he had improved countless other industrial processes by his discoveries

Those who contributed most to these momentous advances in knowledge were well known to each other. Some of them were fellows of the Royal Society or of the Royal Society of Edinburgh, some were university professors, others were business men intensely interested in the chemistry of their processes of manufacture Wedgwood of pottery fame was a fellow of the Royal Society, and along with Keir, Boulton, Watt, Priestley and Darwin, was a member of the Lunar Society of Birmingham, whose chief interests lay in the problems of chemical manufacture. Boulton, Watt and Roebuck were also fellows of the Edinburgh Royal Society, along with Professors Black and Home.

The profession of chemistry, however, did not develop so rapidly as the profession of engineering, perhaps because chemistry is more directly dependent on laboratory experiment than engineering which makes its most valuable tests under normal working conditions in engineering shops and on ships at sea Laboratories call for large sums of money, usually beyond the pocket of individual investigators In an age when progress was estimated by output of goods, it was difficult to break down the prejudice against "pure" chemistry. At the opening of the nineteenth century there were few facilities for research It is true that the Royal Society, as well as numerous other societies, encouraged research; but investigators had

to depend for the most part on private benefactions. Wedgwood liberally financed Priestley. Both Roebuck and Boulton lavished money on perfecting Watt's steam engine. In Scotland, however, there was a lively interest in scientific investigation. Chairs of chemistry were founded at Edinburgh in 1713 and at Aberdeen in 1793, while the Royal Philosophical Institution, founded in 1799, provided almost the only centre for experimental work in England. London had its first chair of chemistry at University College in 1828, its second at King's College in 1831 Before the middle of the century the Royal College of Chemistry had been founded, as well as a chair of chemistry at Owens College in Manchester.

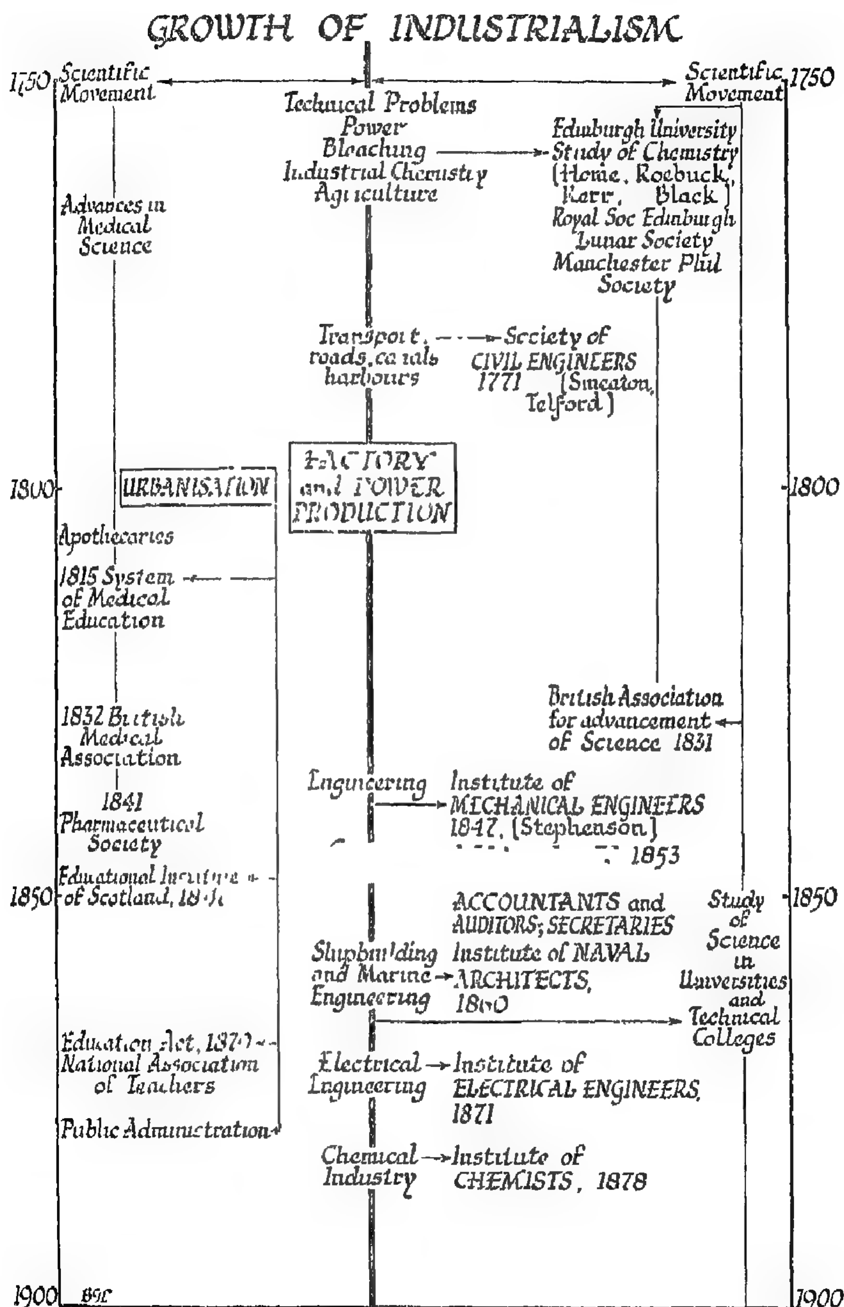
The need to provide scientists of all branches with a common meeting-ground led to the founding of the British Association for the Advancement of Science in 1831. Ten years later chemists themselves started an organization of their own. At first the Chemical Society was simply a study group, but the increasing part played by chemists in industry encouraged the proposal to demand a professional qualification of its members. Discussions were protracted, but the matter became urgent when the *Sale of Food and Drugs Act* of 1875 authorized the appointment of public analysts. Accordingly, a new society—the Institute of Chemistry—was founded in 1878. A few years later it received its charter. The Institute was given powers to hold examinations, to have the exclusive use of the titles F.I.C. and A.I.C., and to exercise discipline over its members. Chemistry had become a recognized profession.

ADMINISTRATION

Advances in technology have necessarily involved production on a large scale. The modern company counts its capital in millions of pounds and its employees in tens of thousands. In the early days of the Industrial Revolution it was common to find the owner or chief partner head of the business, directing its policy and carrying on the management. That phase quickly passed. As more and more capital was required, the number of partners increased, and this process was facilitated when a series of Acts, passed between 1855 and 1862, permitted creation of companies with limited liability. The advent of this type of business raised problems of industrial organization, of marketing, of labour organization, of finance, and the tendency has been for these functions to pass into the hands of salaried experts

One of the earliest professions thrown up by big business is accountancy. Scotland led the way. In 1853 associations of accountants were formed in Edinburgh and Glasgow. Later they were incorporated by Royal Charter. The exclusive right to a title is generally of great value to a professional body, and when the Edinburgh accountants hit on the title "chartered accountant" with the abbreviation C.A. the other Scottish societies followed suit. A General Examining Board to control all examinations was set up; and in 1915 a standing joint committee was established.

In England, professional accountancy developed after the passing of the Companies Act of 1862 and the Bankruptcy Act of 1869. An association of



TIME CHART 13 INDUSTRY AND THE NEW PROFESSIONS

Accountants was founded in Liverpool in 1870 Ten years later a charter was granted creating the Institute of Chartered Accountants in England and Wales Many accountants, however, elected to remain outside the Institute and others, partly because of the social barriers created by the enforcement of articles and the payment of large premiums, were unable to qualify for membership. The outcome was the founding in 1885 of a new body, the Society of Accountants and Auditors, which received a charter and later legal protection for the use of title "Incorporated Accountant." To-day the educational standards of these bodies are much the same, but because of social prestige the chartered accountants secure the lion's share of company and public work

The growth of large-scale production and company organization has been responsible for the employment of large numbers of salaried people in addition to those already mentioned. On the side of administration, there is a growing body of professional and semi-professional people. Every company must have a secretary, and in large companies such men or women require very special qualifications Sometimes such posts are held by accountants or lawyers, but to-day there is a professional body of secretaries The Institute of Secretaries came into being in 1891. A few years later it was incorporated as the Chartered Institute of Secretaries of Joint Stock Companies and other Public Bodies Like other professional bodies it holds examinations and demands certain qualifications of its members. As for accountancy, there is a rival body This is the Incorporated Secretaries Association, founded in 1907.

Besides secretarial staff, there are many other salaried employees in large businesses appointed on the basis of academic and other qualifications. Many firms to-day make staff appointments from university graduates. In the nature of things technical qualifications are not demanded, but promising men and women, with ostensibly intellectual attainments, are eagerly sought After the First World War many universities established departments of commerce and granted degrees in the expectation that there would be a demand for men and women with special qualifications in economics and allied subjects Whether they come from universities or from secondary schools, the significant fact is that the salaried staff in every department of business to-day plays an increasingly important part. They occupy managerial and administrative posts. They act as buyers and market experts and fill innumerable other posts in commerce and industry. Whether their education should have a definite bias to economics and problems of administration has been much debated In the belief that there is a technique of business management, the London School of Economics in 1931 established a Department of Business Administration

HEALTH

The Institutes share with the Universities, which were late-comers in the field, the task of maintaining standards of qualifications for expert employment in the profession of engineering. In medicine a similar dualism with no counterpart on the Continent, in the New World or in the Dominions, is also characteristic of Britain, more especially of England, where the

universities are now the cradle of medical research and the Royal Colleges of Physicians and Surgeons still offer the most highly coveted diplomas for consultative practice Circumstances which have encouraged the growth of professionalism outside the framework of standards set by the universities, in particular the exclusion of nonconformists and hence of a large section of the social strata largely contributory to the personnel of the professions till late in the nineteenth century, undoubtedly contributed to this state of affairs There were others, peculiar to the development of medicine itself.

The oldest medical schools of the Continent were started in the thirteenth century by Jewish missionaries of the Moorish culture, and Jewish influence has remained strong in the medical schools till this day. In medieval times several things made this inevitable. When Europe was largely illiterate, the Jewish boy, brought up to read the works of the Law, had a passport to the secular professions When papal bulls prohibited usury and the dissection of the human body, Jewish peddlars were free to specialize as bankers and Jewish scholars to prosecute researches in anatomy, undistracted by any temptation to enrich themselves by capitalist farming from which they were debarred by legal prohibition to ownership of landed estates. In Britain, they remained (p. 546) under a cloud from 1292 till Cromwell's regime brought them a respite, in striking contrast with prevailing misconceptions concerning puritan intolerance The Universities of Britain were slow to provide facilities for teaching medicine. Aberdeen, which had the first chair of medicine, founded in 1505, had no flourishing medical school for the next three hundred years. Oxford and Cambridge followed in 1547 after the first Act to regulate medical practice under Henry VIII Thus there were no flourishing medical schools in the Universities of Britain till the seventeenth century. The generation which followed Harvey were witnesses to the religious persecutions which closed its universities to the outstanding leaders of science produced by England during the next two centuries.

In England, the history of medicine as a profession goes back to the founding of the College of Physicians in 1518. For upwards of one hundred years this body played a notable part in the training of physicians and in the advance of medical knowledge Several of its leading members were among the founders of the Royal Society in 1662. But thereafter its usefulness declined as it became more and more exclusive and set more value on social status than on intellectual standards It shared its eclipse with the Universities of Oxford and Cambridge, whose medical schools were of little consequence until the present century The bodies authorized to make medical provision for society had failed in a duty they shared with the apothecaries, originally associated with spicers, pepperers and grocers in the sale of drugs and condiments from the East In the course of time, some of the fraternity specialized in dispensing as well as in selling drugs, a function recognized by an Act of 1542. In 1617 James I incorporated them as the Society of Apothecaries.

The exclusiveness of the College of Physicians and of the Universities drove people to look elsewhere for medical advice Apothecaries seized the opportunity Before the end of the seventeenth century they were general medical practitioners. The older privileged bodies naturally tried to check

this invasion of their territory (Fig. 51), but a famous court case of 1703 declared that

"the function of an apothecary consisted, not only in compounding and dispensing, but also in directing and ordering the remedies to be employed in the treatment of disease"

Being a lively body, the apothecaries set about consolidating their position. By an Act of 1722 their Society got authority to supervise all apothecaries in London. Twenty-six years later they were authorized to appoint a board of examiners. They thus came to be recognized as a lower order of medical practitioner, who indeed provided medical attention for the mass of the people in the eighteenth century. They competed with wholly unqualified practitioners, despite numerous efforts to reserve the field for qualified men alone.

In Scotland, the Universities, the Royal College of Physicians in Edinburgh and the Faculty of Physicians and Surgeons of Glasgow were the only licensing authorities. The last-named received a charter from James VI in 1599 giving it authority over surgeons, physicians and apothecaries throughout the burghs of Glasgow, Renfrew and Dumbarton and the counties of Lanark, Renfrew and Ayrshire. As in England, disputes occurred between the different branches of medicine. In Edinburgh, where apothecaries dispensed medicines and gave advice, there were frequent clashes with surgeons and physicians. Through their guild the former had authority over surgery in the city; and they used their power to check interference by the apothecaries It was not until 1681 that the Royal College of Physicians of Edinburgh was incorporated.

Unlike the London College of Physicians and the Universities of Oxford and Cambridge, the Edinburgh College of Physicians, and especially Edinburgh University, were active bodies in the advancement of eighteenth-century medicine. Drawing its inspiration and teachers from Leyden University, the Edinburgh medical school combined instruction with clinical practice at the newly-established Royal Infirmary, and quickly advanced to fame Its alumni soon established a high reputation for Scots medicine. The local surgeons broke away from the barbers with whom they had been incorporated in 1506, and founded the Royal College of Surgeons of Edinburgh in 1778. For more than a century to come Edinburgh, Glasgow and Aberdeen provided the best training in medicine and surgery in Britain. South of the Border such men as Hunter, Meade, Pringle, Lind, Blane and Jenner were illuminating some of the dark places of medicine and showing the urgent need for reform in face of the apathy and incompetence of the bodies charged by charter with the training of physicians. The English surgeons were displaying more initiative than the physicians. In 1745 they parted from the barbers, who were now reaping great profits from wig-making. The Surgeons' Company thus established gave place in 1800 to the Royal College of Surgeons of London. Forty-three years later it became the Royal College of Surgeons of England.

At the opening of the nineteenth century the condition of the medical profession was chaotic. On the top rung of the ladder were the physicians,

below them "the three inferior grades of surgeons, apothecaries and even druggists." This division was not based on intellectual standards or on professional specialization, but on social status. Many medical men qualified as surgeons as well as apothecaries, hence their designation as *general practitioners*. This body of surgeon-apothecaries took the first step to reform the standard of the profession. They promoted a bill in the House of Commons to check the practice of unqualified persons and to advance the professional requirements of the qualified The Act of 1815 gave the Society of Apothecaries the right to examine and license all apothecaries in England and Wales. Before this time qualification was obtained by serving an apprenticeship and "walking the hospitals." Some of the London hospitals had already established the beginnings of a medical school, but most formal instruction was obtained privately from individual physicians. It was largely as a result of the Act of 1815 that a system of medical education and examination came into being in England. Oxford and Cambridge had failed to give the instruction which was expected of them, and the London hospitals displaced them as centres of medical instruction. According to the Royal Commission of 1852, Oxford had "ceased altogether to be a medical school."

The new general practitioners, licensed by the Society of Apothecaries, naturally felt aggrieved at the pretensions of the physicians and surgeons who retained privileges without sufficient justification. A large number of licensing authorities with their own territorial limitations made the maintenance of a general professional standard impossible. Fully alert to the urgency of the problem, the practitioners formed several associations, the most notable being the Medical and Surgical Association formed at Worcester in 1832. Twenty-four years later this became the British Medical Association, soon to be the best organized and most powerful trade union in the country. The new associations demanded the abolition of the licensing powers of the older corporations and universities Controversy was acute, and two Parliamentary inquiries were held before the famous Medical Act of 1858 opened a new phase in the history of the profession. At the time it pleased nobody, though events have vindicated the wisdom of its promoters. It gave the medical profession statutory authority over the teaching and practice of medicine. It established an important body called the General Medical Council, representing the medical corporations of the United Kingdom and Ireland, the Universities, the medical profession and the Crown. In practice it has been a purely medical council Until 1926 no layman was ever a member.

According to the Act of 1858, the G.M C. has two important functions One is to keep a register of all qualified persons and to determine requisite qualifications. Within its framework the universities and other licensing authorities retained their powers to teach and to examine, but became subject to the ultimate control of the Council, which reserved the right to inspect them and to make recommendations concerning the curriculum. If dissatisfied with the standard of attainment at any centre, the Council can recommend the Privy Council to erase its name from the list The G.M C is thus in a position to enforce *minimum* requirements on all those who wish to register; but it has also a second function. The Council has the power to

remove from its Register those whom it regards as unfit or unworthy to practise. There is no appeal from its decision

Unlike the General Medical Council, the British Medical Association is not a statutory body. It is a professional body with strong trade union activities Its main concern is with conditions of employment, salaries, and professional etiquette. To-day it is a very powerful body with a membership of 35,000 or almost three-quarters of all the medical men in Britain. There are rival associations, such as the Medical Practitioners' Union, but they are small and unlikely to challenge the larger organization. During the National Health Insurance Act controversy, the B.M A. marshalled its forces, bargained collectively, and threatened to use the strike weapon. By blacklisting local authorities and by refusing advertisements in its official journal, it has forced public bodies to pay what it regards as adequate salaries The lively interest of the medical profession in status, conditions and salaries is shown not only in the activities of the B M.A. but in the influence it brings to bear on the G.M.C on any matter pertaining to professional etiquette.

Originally the apothecaries dispensed and sold drugs To-day, as everyone knows, that is the job of the "chemist" and druggist or pharmacist, as he is more properly called As the apothecaries invaded the preserves of the physician, the chemist and druggist occupied the ground they vacated. At first the apothecaries tried to check this invasion and when they found this impossible, they sought powers to control it but without effect. In 1829 the chemists formed the General Association of Chemists and Druggists of Great Britain. In 1841 this became the Pharmaceutical Society.

TEACHING

Teaching is one of the oldest professions, yet it is only within the last two generations that it has acquired the status of a distinct profession Unlike physicians and surgeons, teachers had no medieval organization. Teaching was a function of the Church; and in England a close association has persisted to the present day Headmasters of the so-called "public" schools are often clergymen, who regard their appointments as a step in the ecclesiastical ladder

In Scotland, the emergence of a teaching profession occurred much earlier than in England John Knox himself was the author of a scheme to utilize church revenues at the Reformation so as to provide every parish with a school, and hence to provide the nation with a secular teaching profession. It was never completely carried out. Right down to the nineteenth century the Church kept a tight grip on schools and schoolmasters. By this time, however, public opinion was ripe for great advances The Education Act of 1872 abolished religious tests for schoolmasters and transferred to the universities the duty of examining the qualifications of teachers, while the newly-established Scottish Education Department instituted a system of inspection of schools.

Like medical practitioners, teachers have created professional associations to represent their common interests. Scotland was first in the field with an Educational Institute founded in 1847. Its manifesto declared.

"As the office of a Public Teacher is one of great responsibility, and of much importance to the welfare of the community, as it requires for its right discharge a considerable amount of professional acquirements and skill, and as there is no organized body in Scotland whose duty it is to ascertain and certify the qualifications of those intending to enter upon this office, and whose attestation shall be a sufficient recommendation to the individual and guarantee to his employers, it is expedient that the Teachers of Scotland, agreeably to the practice of other liberal professions, should unite for the purpose of supplying this defect in the educational arrangements of the country, and thereby of increasing their efficiency, improving their condition, and raising the standard of Education in general "

The immediate aim of the Institute was self-government of the profession and to that end it secured a Charter in 1851; but owing to the jealousy of the Church, as well as to the increasing part played by the State in education, the teachers have never received the right to license the members of their profession After the Education Act of 1870 there was formed in England a National Association of Elementary Teachers,

"to unite together, by means of local associations, public elementary teachers throughout the kingdom, in order to provide a machinery by means of which teachers may give expression to their opinions when occasion requires, and may also take united action in any matter affecting their interests."

In 1889 the Association discarded the word Elementary from their title, and admitted all certificated teachers Later it became the National Union of Teachers.

"The Union," it is officially declared, "is neither an Incorporated Professional Institute nor a Trade Union, but it combines the best features of each, with certain functions peculiarly its own "

It concerns itself with salaries and status, but it also devotes much attention to the advancement of education. In the post-war period it did valuable service in raising the salaries of teachers of all grades It is by no means as inclusive as the B M A , which takes Scotland as well as England within its parish, and in England it competes with several rival organizations whose existence reflects the social stratification of English education and the existence of a large body of teachers trained in colleges which enjoy a lower social prestige than the universities and offer inferior educational facilities.

PUBLIC ADMINISTRATION

In one form or another state service is very ancient In medieval times the high offices of State were held by church dignitaries. The Reformation ended this association; but for many centuries there was no civil service in our modern sense Appointments were in the patronage of ministers of State and emoluments were generally derived from fees charged to the public for service rendered. The political movement, which achieved its first triumph in 1832, was more than a movement for a more equitable distribution of the

franchise; it brought its influence to bear on every aspect of social and political life. Municipal administration, factory conditions and public service of all kinds came under the lash of its constructive criticism By an Act passed in 1853, it swept away the system of patronage in the Indian Civil Service and decreed that appointments should henceforth be through public examination. The logic of the same policy as applied to the home public service was irresistible. Following the recommendation of a Committee, the Civil Service Commission was established in 1855

"to conduct the examination of young men, proposed to be appointed to any of the junior situations in the Civil Establishment."

By subsequent steps, culminating in the Order in Council of 1920, the whole civil service was thrown open to examination Meantime new problems of municipal government were being tackled. The Municipal Reform Acts of 1833 and 1835 placed the government of all large towns in the hands of elected town councils, and from this point a local civil service dates its origin.

Unlike the state civil service, local government numbers a high proportion of technical experts among its employees—civil engineers, electrical engineers, gas engineers, medical officers, directors of education, lawyers and so on. In all departments there are also large clerical and administrative staffs. There is no statutory machinery of admission by public examinations. Like other large-scale enterprises, local authorities are free to recruit their employees on the basis of standards imposed or maintained by professional bodies or by diplomas of recognized centres for instruction.

The national civil service is thus encumbered with an apparatus of personnel recruitment peculiar to itself, and called into being by circumstances utterly irrelevant to modern needs. A general examination, prescribed as a safeguard against patronage and corrupt practice at a time when the English universities were either decadent or infantile, selects candidates for employment on the basis of scholastic qualifications which have no necessary connection with their future tasks and excludes those who, with accredited qualifications for such tasks, have little inclination to undertake the risk or drudgery of preparing for additional tests with uncertain prospects of reward Two wars which have called for a considerable expansion of civil service personnel have exposed this anachronism as a powerful force for conservatism by banishing initiative and expert knowledge from scope within the bureaucratic machine, as it functions between one war and another. Little short of a social cataclysm will rid the Homeland of the archaic incubus it owes to the Act of 1855.

THE NEW MIDDLE CLASS

The rise of the professions touched on in this chapter is one of the most significant features of recent history. Both in America and in Britain their numbers and their importance are increasing. They represent the most important element in the diverse congeries of social groupings called *middle class.*

Progress of specialization in the economic system has created a bewildering

variety of occupations, yet we rightly group certain ones together People of these groups are not necessarily conscious of common interests, but when a time of testing comes they draw together by irresistible social forces. Karl Marx stressed the social cohesion of wage-earners accustomed to similar standards of living and united by a common social outlook. The middle class is less homogeneous. Within it there are wider differences of pay, of intellectual attainment and of social contacts. What gives it a certain measure of cohesion is less the consciousness of its unity than realization of its differences from others. By tradition and education, by possession of property, it draws closer to the wealthy than to the wage-earners, but the segment discussed in this chapter is wedded to neither. Its professional interests place it in a category by itself. It occupies a position of immense potential power in contemporary society. Without its interest and support no fundamental scheme of social reform can be carried out

According to the Census of 1931 professional workers in Great Britain numbered three-quarters of a million. Though this represents only 8 per cent of the occupied population, it is larger than the numbers returned in the 1921 census by 80,000, an increase proportionately more than the increase in the occupied population. Thus the proportion of the total working population represented by the professional classes is growing in Britain, and this is true of all economically advanced countries The following table is from Carr-Saunders and Caradog Jones (*Survey of the Social Structure of England and Wales*, Oxford, 1937, 64). The reason for the large number of professional women is found in the fact that the majority of teachers are women.

PROFESSIONAL OCCUPATIONS

ENGLAND AND WALES, 1921 AND 1931

Occupations connected with	Nos. Occupied (000's)				Per cent of total	
	M.	F	Total 1931	Total 1921	1931	1921
Teaching	84	200	284	278	38	42
Medicine and Care of Sick	73	154	227	171	31	26
Religion	44	15	59	56	8	8
Consultant Engineering, Analytical Chemistry, and other Sciences	61	3	64	38	9	6
Law and Accountancy	33	0	33	25	4	4
Art and Architecture	20	6	26	23	3	3
Writing and Publication	19	7	26	16	3	2
Other Professional Occupations	10	4	14	12	2	2
Articled Clerks, Pupils and Other Students	13	0	13	48	2	7
Total	357	389	746	667	100	100

The middle class, as we customarily use the term, is a medley of social groups—small tradesmen, agents, salesmen, professional practitioners and

highly trained technicians, with little in common except lack of those characteristics which distinguish them, on the one hand, from the wealthy rentier or directors of large-scale industry, on the other from the wage-earner, small peasant or huckster Between the small businessman who passes as one of its members and the director of a large industrial corporation there is no hard and fast line. Nor is there a clear-cut boundary between the skilled wage-earner and the professional employee At one time, the skilled wage-earner was easily definable as such, and the same definition still holds good for a large body of employees whose employment depends on no special educational qualifications What distinguishes them from the unskilled workman is that their eligibility for such specialist work as they do depends on a period of apprenticeship; and what distinguishes them from the professional employee is the special qualifications the latter owes to facilities of instruction prior to employment. Where professional employment depends on a specialist diploma or degree conferred at the end of a period of higher instruction, the definition of the professional employee is also clear-cut, but modern educational facilities admit of many levels of higher education and the continuation school threatens to supplant apprenticeship to a trade. A great expansion of clerical work and of the distributive trades has encouraged a growing demand for employees with a certificate of secondary school education, and the modern polytechnic offers a great variety of diplomas open to candidates with no schooling beyond the primary level.

To this extent the barriers between the middle class employee and the artisan are becoming blurred, as, for other reasons, the boundary between skilled and unskilled wage-earners is becoming less sharp; and further extension of educational facilities must make it still more blurred. As technical education invades the province of industrial apprenticeship, one of the most conservative forces of production will operate with diminishing intensity. *Inter alia* the stability of an economy depends partly on availability of raw materials for production, partly on availability of personnel with productive skill In the past, apprenticeship has been the chief means of ensuring availability of skilled personnel, and established industries of one country or district have continued to thrive in competition with young industries in countries or districts with more ample natural resources for successful activity Before the liquidation of illiteracy by universal education the transmission of skill depended largely on example and word of mouth When the creation of a new industry in a more favourable situation had to await importation of skilled personnel from elsewhere, the introduction of a productive technique might depend on the accidents of war, political repression or religious persecutions which drove the craftsman from his home or the artisan from his homeland. Modern knowledge makes it possible to plan the location of industry without recourse to large-scale migration, by organizing the transmission of skill in a new way. It thus speeds up the interval between the decline of an industry which has exhausted its resources of accessible raw materials or economical power in one situation and the birth of an industry in a locality which offers special resources of raw materials or power for its use.

One conclusion which emerges clearly from the record of professionalism

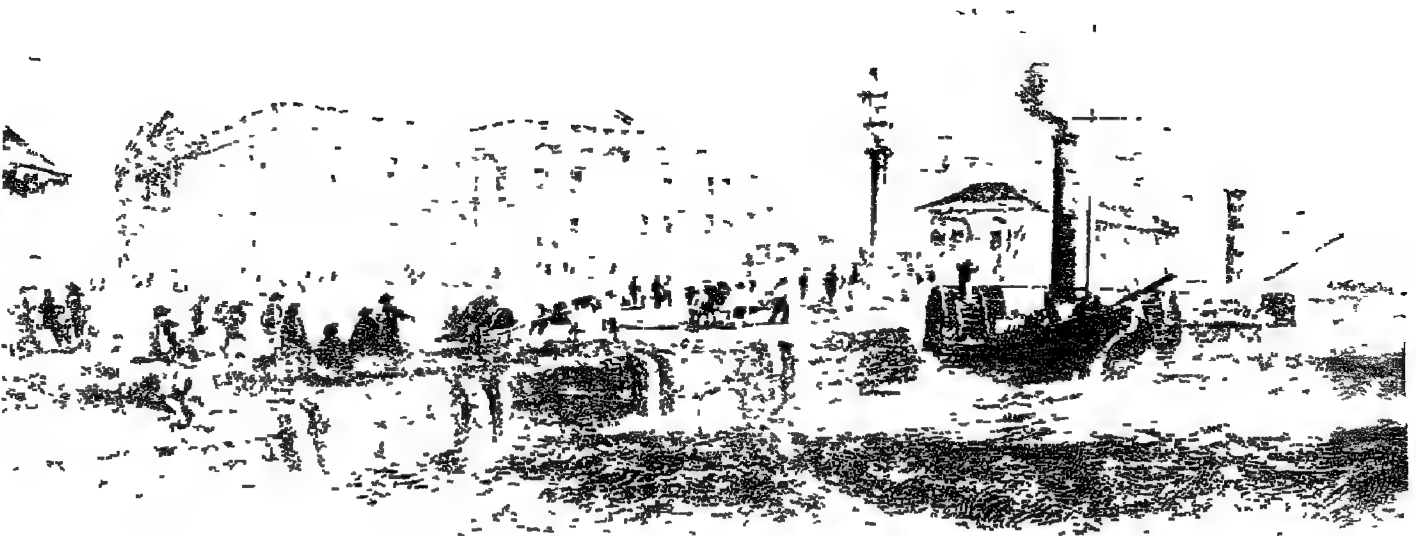
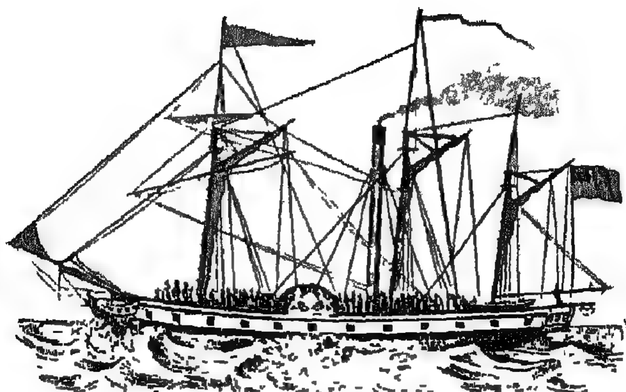


FIG 65 EARLY STEAMBOATS AT GREENOCK, 1820

(Two Centuries of Shipbuilding, *by permission of Scott's of Greenock and the Editor of* Engineering)

In the foreground, two paddle steamers, of primitive appearance and only fit for river sailing, indicate the beginnings of a new era of sea transport In the background are the tall masts of sailing ships, still supreme on the high seas for another fifty years No one then thought the steamer capable of long voyages in the open sea

(See p 350)



THE MAJESTIC,

Captain OMAN,

AND

THE CITY OF GLASGOW,

Captain CARLYLL

Sail from GREENOCK every MONDAY, WEDNESDAY, and FRIDAY, at One o'Clock in the Afternoon, and from LIVERPOOL, every MONDAY, WEDNESDAY, and FRIDAY, at Ten o'Clock in the Fore noon, calling off PORT PATRICK, and at DOUGLAS, ISLE OF MAN, both in going and returning from LIVERPOOL

These Packets carry no Goods, being expressly fitted up for the comfort and accommodation of Passengers

FARES.

For the First Cabin, including Provisions and Steward's Fees	To Port Patrick	To Isle of Man.	To Liverpool	To Greenock
From Greenock,	£1 1 0	£1 10 0	£2 [illegible] 0	£0 0 0
Port Patrick,	0 0 0	1 1 0	1 11 0	1 1 0
Isle of Man,	1 1 0	0 0 0	0 17 6	1 10 0
Liverpool,	1 11 0	0 17 0	0 0 0	2 5 0

For the Second Cabin without Provisions.	To Port Patrick	To Isle of Man	To Liverpool	To Greenock,
From Greenock, -	£0 10 0	£0 10 0	£0 10 0	£0 0 0
Port Patrick,	0 0 0	0 10 0	0 10 0	0 10 0
Isle of Man,	0 10 0	0 0 0	0 0 0	0 10 0
Liverpool, -	0 10 0	0 0 0	0 0 0	0 10 0

Children under Twelve Years of Age Half Fare

ON DECK.

A Coach, - - -	£4 15 0	A Horse -	£2 10 0
A Chaise, - - -	4 0 0	Dogs, per couple, -	0 10 0
A Gig - - - -	2 10 0		

Parcels Forwarded to the Isle of Man and all Parts of England.

[illegible] Value of [illegible] expence [illegible] tours

May 1, 1826

JAMES LITTLE, *Greenock,*

FIG. 66 THE *MAJESTIC* SAILING BILL, 1826.
(David Napier, 1912, *by permission of Jackson, Son & Co*)

The steamers referred to in this *Sailing Bill* were among the first to take part in the coasting trade Designed "for the comfort and accommodation of passengers," they sailed between Greenock and Liverpool, completing the journey in about twenty-five hours

(See p 350)

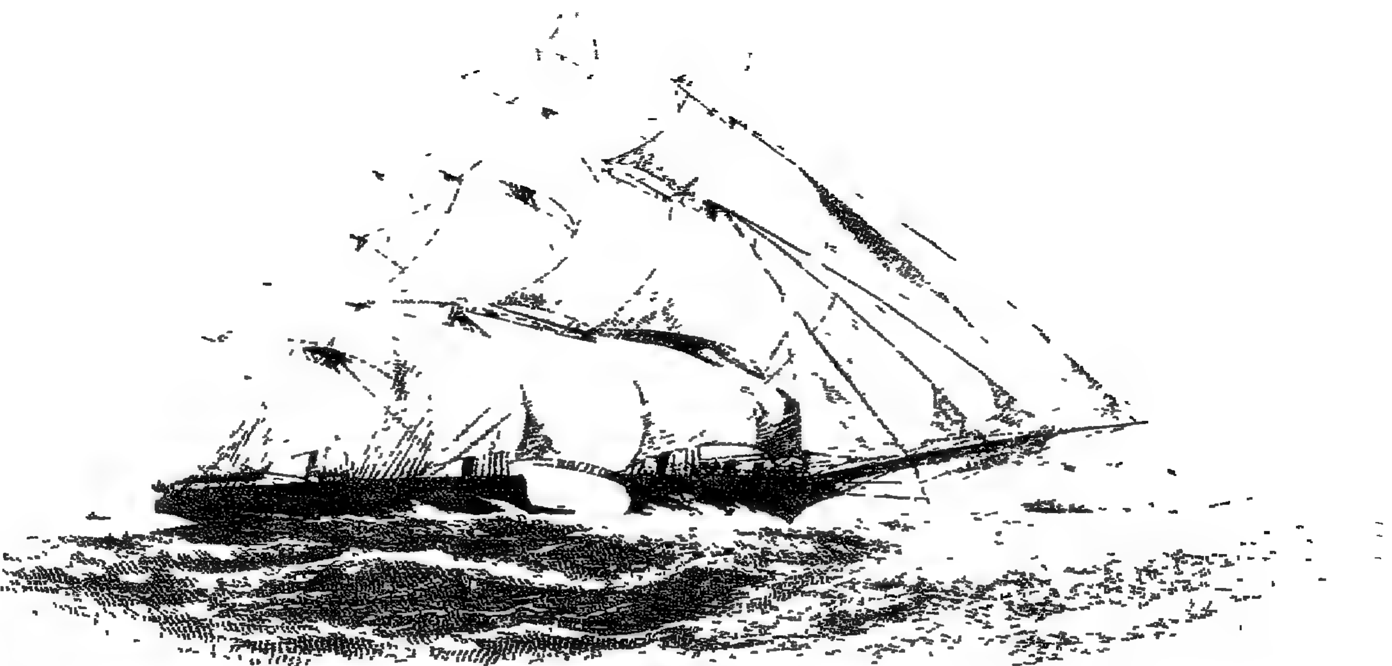


FIG 67 THE GREAT SHIP-RACE FROM CHINA TO LONDON THE *TAEPING* AND THE *ARIEL* OFF THE LIZARD.

(*By permission of the* London Illustrated News)

This was one of many famous races from China with the first of the tea crop The *Clipper* here shown is graceful and speedy, for many years maintaining supremacy on long voyages, especially to China and Australia The ordinary sailing ship was clumsy by comparison, heavily built, designed for cargo rather than speed The contrast with the East Indiaman (Fig 48) is less striking

(See p 351)

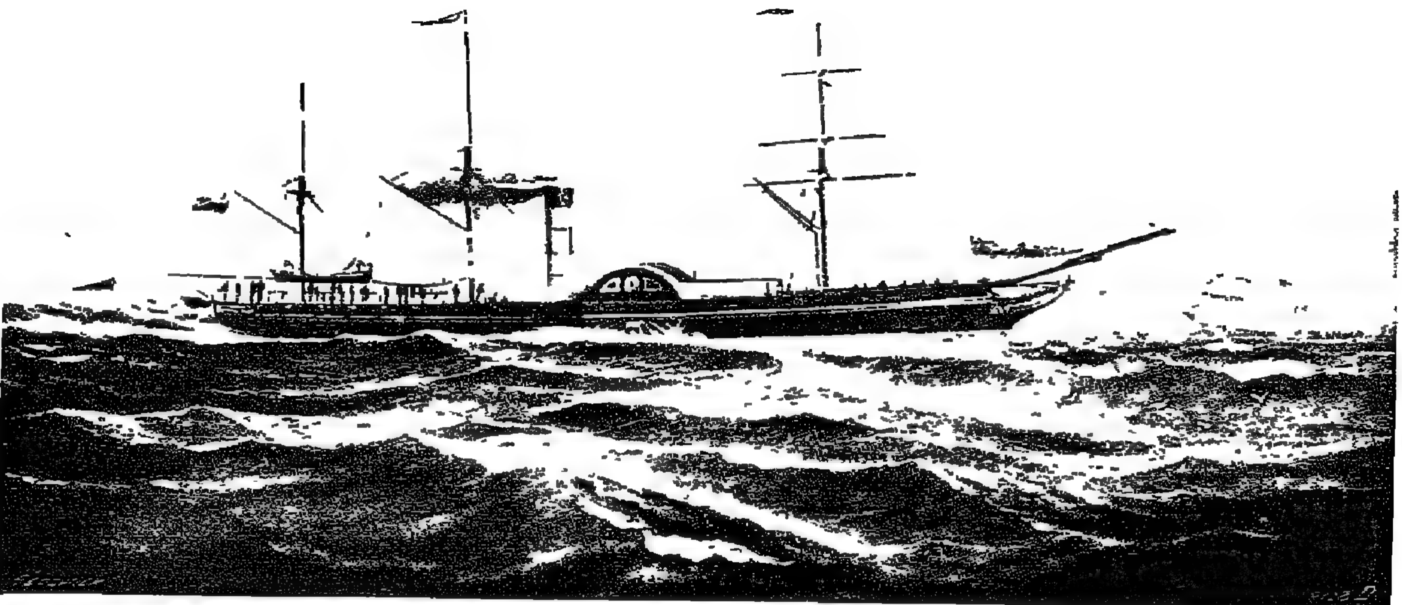


FIG 68 SCOTT'S FIRST P & O LINER, *TAGUS*.

(Two Centuries of Shipbuilding, *by permission of Scott's of Greenock and the Editor of* Engineering)

This ship, built in 1836–37, started a long association of Scott's of Greenock and the Peninsular and Oriental Shipping Company Still equipped with sails, the *Tagus* registered a great advance in design, construction and power on earlier steamboats She was a *paddle* ship, but the screw or propeller had been invented before she was completed Controversy on the relative merits of paddle and screw continued for another ten years

(See p 352)

ADVERTISMENTS

FIG 69. ADVERTISEMENT FROM HOUGHTON'S COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE, 1693

This advertisement shows the kinds of goods so much sought after in India by Europeans—silks, cottons, chinaware, tea, coffee, pepper, nutmeg These new commodities for which Dutch, English and Portuguese competed, enriched the lives of Europeans by giving them a more varied standard of living Their use, of course, met with opposition especially from the woollen manufacturers, but they stimulated the new silk and cotton industries

(See p 366)



FIG. 70 THE SHOP OF A LONDON TOBACCONIST IN 1617
(*MacInnes,* The Early English Tobacco Trade, *by permission of George Routledge & Sons*)

In the window are pipes, flagons, jugs and bottles, and the model of a negro boy smoking a vast cigar, and carrying another under his arm Above the doorway hangs a picture of a *Nicotiana* (tobacco plant) plantation, with negro figures, two running and one swimming The drawn curtain reveals three smokers at a table supported on kegs of tobacco Their names are given as Captains *Whiffe, Pipe* and *Snuffe*
(See p 370)

CAROLINA.

THe *Company* for *Royal Mines*, Copper and other Works in Cumberland, *&c.* having a Grant from the *Lords Proprietors* of the Province of Carolina in America of all the Mines Royal and other Mines with any subterranean Treasure that shall be discovered in the said Province

These are to give notice, That any Person well understanding Mines, Minerals, *&c.* and the art of mining, may apply themselves to the Committee appointed for managing the same, sitting at Mrs. *Vernon*'s Coffee-house in *Bartholomew*-Lane behind the *Royal Exchange* every *Tuesday* at four a Clock in the Afternoon. And if desirous to serve the said Company in *Carolina* aforesaid, may have encouraging Proposals made them for the same.

That there are Mines of exrtaordinary value in *America* we reed no other Evidence than the Treasure *Europe* now possesseth, which is supplied by a Yearly Import of Bullion by the *Spaniards*,

Also that there are Mines of equal Value with those possessed by the *Spaniards* in the vast and promising *Apalathean* Mountains which lie in *Carolina*, for 700 Miles in length and are 20 or 30 Miles over, we need not doubt, since they lie in the same degree of Latitude with *Mexico*, *&c.* and are very much noted by Writers for the great Treasure they possess; particularly *John de laet*, of *Antwerp*, *Anno* 1633 in his History of the *West-Indies*; which is confirmed by the unanimous report of the *Indians*, as well as those that have been Eye-witnesses thereof who have brought from thence divers Minerals of good value even from the very surface.

The Country is very pleasant, and the most Southerly of all our *English* Settlement on the Continent, which gives it Preference in many respects to all others, it lying in the same Latitude with *Barmoodoes* and the Land of *Canaan*, (a Climate so much celebrated) and plentiful in Provision both for Sustenance and Exportation; Beef being about 10*s*. the Hundred. Pork 14*s* also Wheat, Rice and most other Products of *England* abound, that Trade and Settlement much increasing, many Ships going thither this Year with some hundreds of Passengers.

This Company is printed in my Account of Actions of the Name of the *Carolina* and *Cumberland* Royal Mines.

FIG 71 ADVERTISEMENT FROM HOUGHTON'S "COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE," 1694

This is the advertisement of the Company of Royal Mines, chartered in 1568 to mine copper and precious metals in England, and now in 1691 considering mining in Carolina The high hopes of the promoters were scarcely realized The text of the illustration shows one method of attracting home labour for colonial enterprises

(See p 372)

THe Territories from whence came most Ships to [illegible] last Year next to Germany, were the English Plantations in the West Indies, and from thence came 138 What, not two Thirds of the Number of what came from the [illegible] Country of the United Provinces Surely their Prudence and Industry are much to be commended and Immitated, and whether 'tis our Idleness, Fearfulness, Losses, or other Employments of our Men and Ships, by reason of the War, I won't determine, but one would think that from [illegible]'s Bay, New England, New York, New Jersey, Pensylvania, Maryland, Virginia and Carolina; on the Main, and [illegible], Barbadoes, Nevis, Jamaica and four other Islands in the Ocean [illegible], more especially, considering that [illegible] in the Map of Commerce, says that 200 Ships have been loaded at Barbadoes in one Year, 1660 and there were upwards of 15505 Tuns, which were about [illegible] this Island is but [illegible] which being [illegible] of the Plantations [illegible] ide might be vast [illegible] but a great many of them yield more bulky Commodities, and it might surely (if we would) employ many more Ships; altho I am not unsensible of many Ships coming from the West Indies to divers other of our Ports [illegible], but how many, I know not, altho the general Customs of London, are as eleven to fifteen of the whole Kingdom [illegible] divers Ships with Tobacco [illegible] of our Out Ports, and pay the Duty, then relade, and so for Holland.

The same Mr Roberts says, there are about 40 Sail a Year laded from Virginia and 10 from Maryland of three or four hundred Tuns each; and I presume by these he means not the West Indians Trading, one with another; and doubtless the Trade has been far greater since then Mr Roberts speaks of

[illegible] Trade, I believe it [illegible] some body's Business [illegible] as can be, and to study how every thing therein may be improved, and what useful known matters grow in other Countries, that in Probability [illegible]

Trade for Bl[illegible]

be carried t[illegible]

their Plenty [illegible]

[illegible] Company in Suspence, they shall exclude others, or not be of use to us, will belong to another Argument

On November 24 1681, in Number 3 of my first Quarto Volume I published my Thoughts to prove that the Plantations did not depopulate, but rather encrease or improve our People; and I have also proved it so that none will gain say me, that the more People we send to our Plantations, the more we must have at home, so long as ever it can be imagined that People will love their Interest, but thither I refer my Reader, and on Friday next expect more from

Yours

John Houghton, F. R. S.

From the Golden Head in Grace Church-street and Corner of Little East Cheap [illegible]

Advertise[illegible]

As I am inform'd, there has been several times since, till December [illegible] 98, to pay the Sums following, viz.

	lent l		pay'd l
Joynt Stocks	500000	00	317000
2 3ds [illegible]	999815	0	674065
3 4ths [illegible]	767981	17	716130
4s Aid	1896674	16	1813375
2d 4s A.	1810248	17	1802624
3d 4s A.	2675075	[illegible]	1049457

London, Dec. 17 1695, the Co[illegible]

Amsterdam,	50	10
Rotterdam,	51	
Genoa	61	
Antwerp,	50	8
Hamburg,	59	9
Cadiz,	58	[illegible]

IN order to encourage a Political Ari[illegible] I am willing (if I can meet with [illegible] dence and hope my Papers will [illegible] that the last Weekly Bill of Mortality [illegible] of these of Males 361, Females 199, [illegible] le males 147, In [illegible] Decreased [illegible] to be [illegible] Ounces [illegible] Peny Weight [illegible] [illegible] Loaf double the White. And [illegible] Account from other Places.

THE Gazette of Dec 19, 95, [illegible] ing 6 great Ships in the [illegible] that the Design of making Crui[illegible] on.

ONE that has been bred a S[illegible] things relating thereto, de[illegible] such, or Clerk to a Wharf, or to [illegible] house of any other Profession [illegible] well recommended

A French Gentleman, who can [illegible] lish, French, and Dutch, would willingly serve some Merc[illegible]

ELIXIR STOMACHICUM [illegible] Stomach, of a delicate Flavour [illegible] be drank at any time, but espec[illegible] as Ale, Tea, Coffee, &c Which for [illegible] pel Wind, for all Indispositions, of the [illegible] Sickness &c for Vapours in Women, [illegible] are mention'd in the Bills sold with it, [illegible] where 'tis sold, excells any one Medicine [illegible] and of such Excellency and Usefulness [illegible] out it about them 'Tis sold by some [illegible] many great Towns in England [illegible] Royal Exchange Gate and at the most [illegible] London. Also by John Harrison the [illegible] at the Raven in Jewin Street, [illegible] Street, Hugh Newman, in the Poultrey, [illegible] Booksellers The Author having [illegible] [illegible] to sell it by Wholesale [illegible] of it sell again, may be there furnish'd [illegible] Price One Shilling each Bottle.

ONE that has waited on a G[illegible] Years, and another 5 Year[illegible] tore, desires some such Employ, [illegible] do any thing belonging to a Lam[illegible] can give Security.

FIG 72 EXTRACT FROM HOUGHTON'S "COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE, 1695"

Houghton was intensely interested in development of English commerce. Between 1692 and 1703 he issued a periodical containing information about ships and foreign trade His own lively, well-written and stimulating "editorials," this one dated December 20, 1695, reflect the commercial views of the time, as in stressing the value of the West Indies in Britain's imperial trade His suggestion that it should be "some body's Business to make a good Natural History as well as can be, and to study how every thing there may be improved" is in refreshing contrast to the doctrines of Malthus current in the nineteenth century

(See p 372)

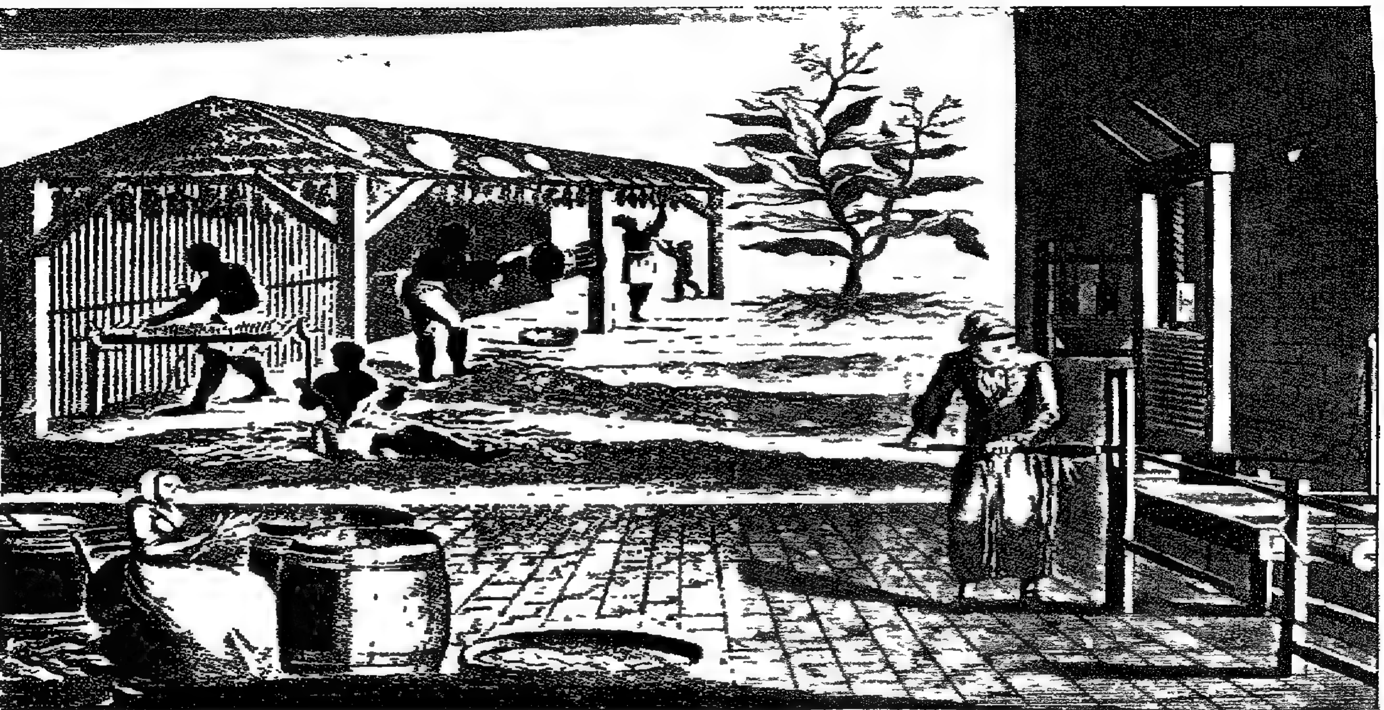


FIG 73 A TOBACCO FACTORY IN THE MID-EIGHTEENTH CENTURY

(*MacInnes,* The Early English Tobacco Trade, *by permission of George Routledge & Sons*)

Growing and preparing tobacco required much labour for the various processes—spinning or rolling, picking leaves from branches, pressing and cutting cakes—here shown Notice the slaves whose primitive clothing provided a market for the coarse linen industry of Scotland The tobacco plant in the background is not, of course, drawn to scale

(See p 380)

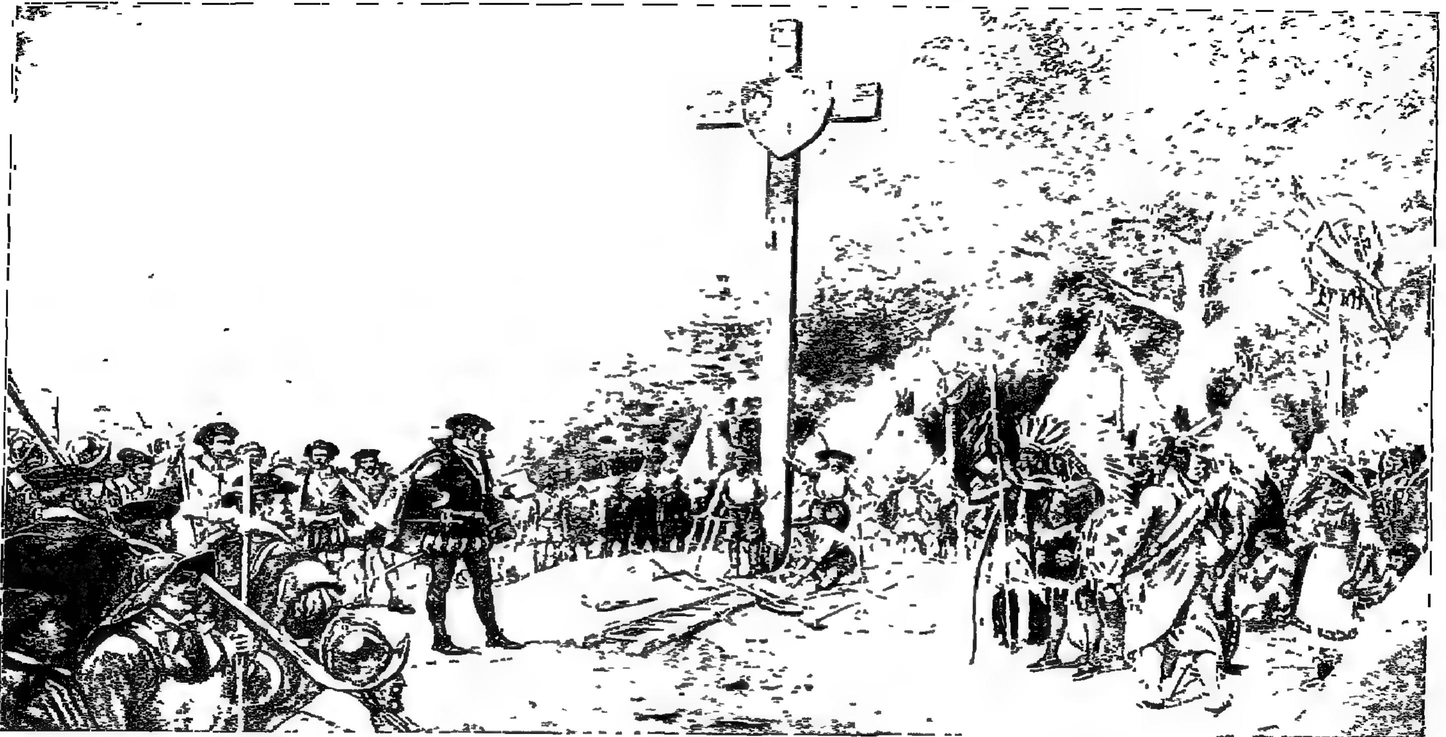


FIG 74 CARTIER TAKES POSSESSION OF CANADA, 1534

(By permission of the High Commissioner for Canada)

France's first contact with the New World was when Cartier subdued the natives by force of arms, and so founded *New France*, or Quebec

(See p 383)

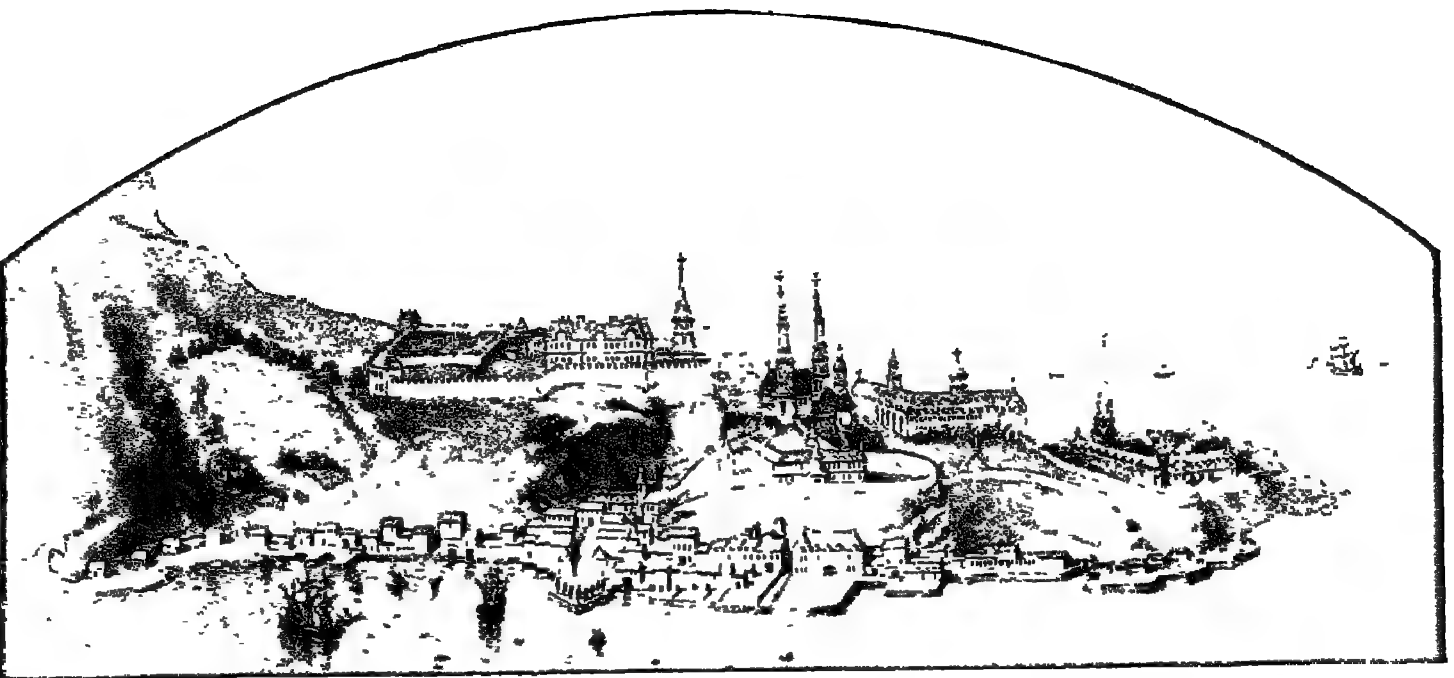


FIG 75 QUEBEC IN THE SEVENTEENTH CENTURY (1663)

(*By permission of the High Commissioner for Canada*)

Fig 74 showed France's first contact with Canada Here we have evidence of colonization and settlement, a French town on Canadian soil, with churches, harbour and houses along the sea shore, as in fishing villages on the Brittany coast whence came many of the settlers The wall betokens that Quebec was still a fortress in a strange land, ready for defence against native or European

(See p 384)

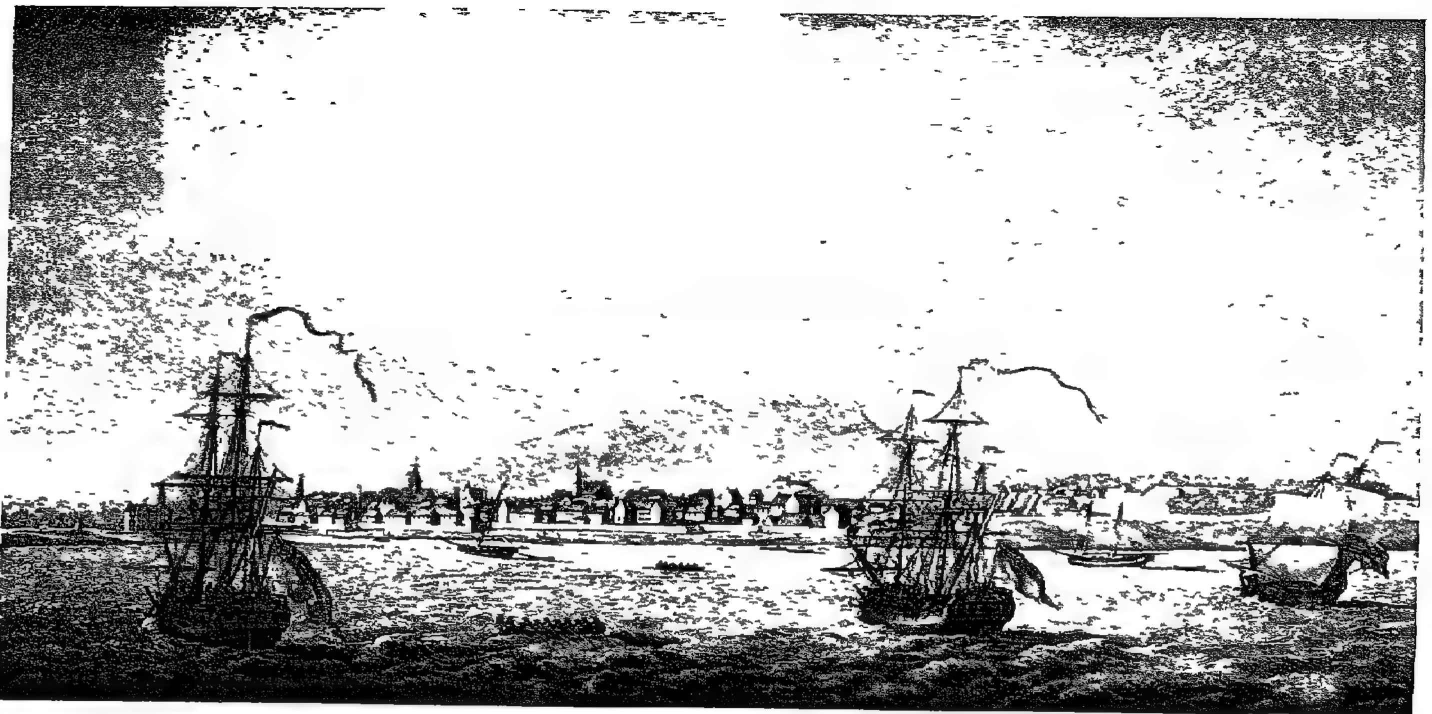


FIG 76 MONTREAL IN THE SEVENTEENTH CENTURY (1685).

(By permission of the High Commissioner for Canada)

Some 150 miles up stream from Quebec, Montreal had a very favourable position at the junction of the Ottawa River and the St Lawrence which provided a means of communication with the Great Lakes, centre of the fur trade, without recourse to the rapids of the Upper St Lawrence It was also within reach of New York by Lake Champlain and the Hudson River In its style of architecture and in its social and religious set-up a French town, like Quebec, it thus became an important distributing centre for trade between the Great Lakes and Quebec on the one side, and New York on the other

(See p 384)



FIG 77 GARRAWAY'S COFFEE HOUSE, 1671

(By permission of the High Commissioner for Canada)

A very elegant clientele here assembles to view the produce and to offer good prices for an article much desired by upper and middle class women It is the beginning of the Hudson's Bay Company's sale of furs in England This was the outcome of a long train of economic effort and exploration, stretching back to the uttermost corners of Canada, linking traders and trappers and native Indians and shippers with the fine ladies of London

(See p 384)



FIG. 78. OLD TRAPPER.

(*By permission of the High Commissioner for Canada*.)

This takes us back to the start of the fur trade The trapper, one of the scores of men employed by the "Great Company," is also an explorer, blazing new trails across Canada in search of furs, and so adding to knowledge of the vast interior It was a life of adventure, of privation and of danger

(See p 305)



FIG 79 THE GOVERNOR OF RED RIVER, HUDSON'S BAY, VOYAGING IN A LIGHT CANOE, 1824.

(By permission of the High Commissioner for Canada)

The Governor, with top hat, proceeds on his tour of the area under his charge in what was the only mode of travel in this land of a thousand lakes and rivers and marshes The natives have been pressed into the service of white men in search of furs. Their knowledge of waterways, of rapids and of routes were of incalculable benefit to the authorities of Hudson's Bay Company.

(See p 395)

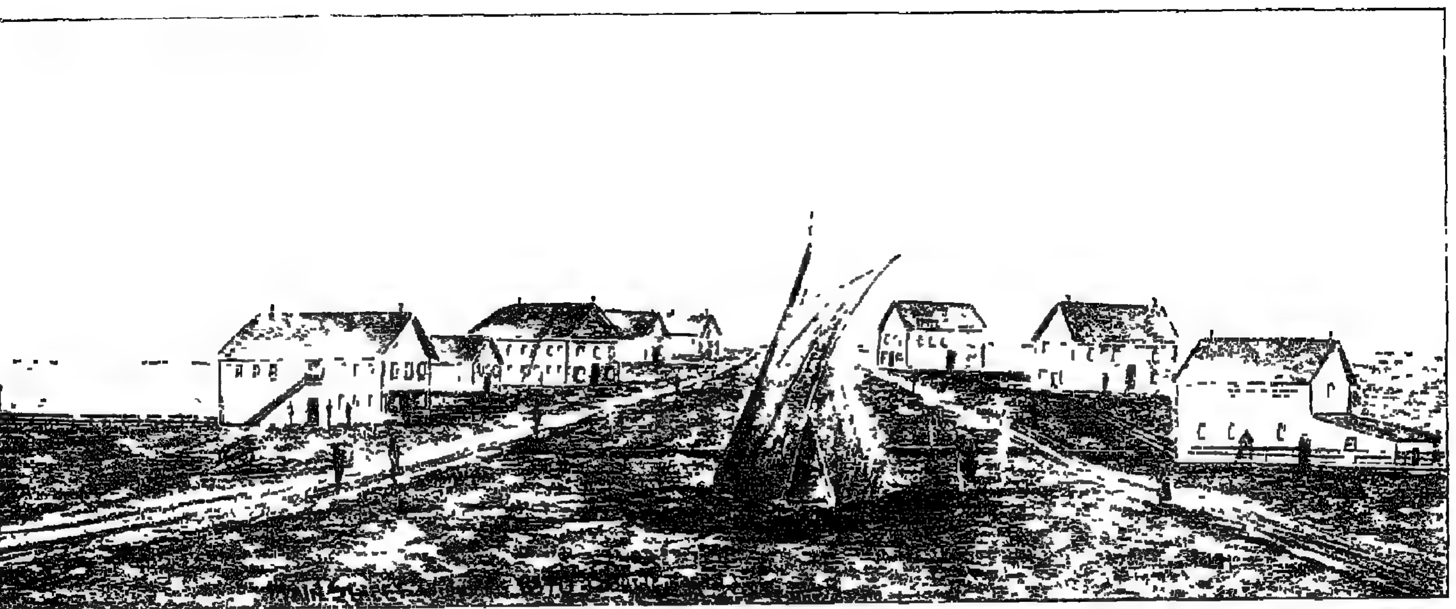


FIG 80 WINNIPEG, 1871.

(By permission of the High Commissioner for Canada)

Less than 100 years ago Winnipeg was a mere cluster of wooden houses standing in a vast plain Some of the inhabitants were pioneers in farming Others were traders of the Hudson's Bay Company For either a new life in Canada offered a prospect of hard and unremitting toil In the foreground is a wigwam, significantly alone

(See p 398)

during the past century is that the body of employees has grown steadily as one profession after another has come into existence Some, like teaching, have already come almost wholly within the framework of the public services; others, like medicine, are clearly in process of doing so in our generation. To that extent the orthodox Marxist analysis of the evolution of capitalism has been justified and is being justified by the course of events On the other hand, the enlargement of the general body of employees by the absorption of this new middle class into its ranks has not been accompanied by a general levelling down of living standards To maintain its existence, monopoly capitalism has had to enlist in the service of the rentier a personnel whose efficiency on behalf of, and whose loyalty to, the system exacts a heavy price. The privileges it enjoys within the *status quo* confer on it an influence out of all proportion to its numbers, and a political programme which discounts its influence does so at its peril.

CHAPTER XII

THE LABOUR MOVEMENT

THE medieval craftsman bought his own raw materials, worked with his own tools in his own home and marketed his own product. We have now seen how the growth of the capitalist system of production divorced the craftsman, first from the raw materials of his trade, then from the tools with which, and the home in which, he worked. When capitalism reached the peak of its development in the nineteenth century, the worker had nothing to sell except his labour. The social gulf which now separated him from the manufacturer, the mill-owner or the mine-owner was now wellnigh impassable. As one industry after another came under the domination of power production and the factory system, the fate of the craftsman was sealed. To some who surveyed the social process which replaced craftsmanship by wage labour the outcome seemed equally inevitable There must needs be a final showdown between two opposing groups, the employees and the employers. In their hour of victory the former would then liberate themselves, and mankind as a whole, from the intellectual, economic and political domination of the capitalist class. A classless society would thus inevitably supersede capitalism.

To date, the outcome has not been so dramatic in any society already highly industrialized within the capitalist framework Nor is there any certainty that it will be The social trends which fortified such hopes in the middle of the nineteenth century had already run their course by that time. As we have seen in our last chapter, the disappearance of the craftsman was offset by the emergence of a professional middle class New types of specialization created the demand for new types of skilled workmanship. The requirements of urban civilization and expanding commercial enterprise had initiated the liquidation of illiteracy. Universal schooling was to bring in its train the night school and the polytechnic, which have blurred the boundary between the province of the skilled artisan and that of the middle class employee. A new and expanding middle class was in process of emerging. The belief that society was separating into two polar opposites, a depressed proletariat and a parasitic rentier, was not vindicated by the sequel to events which encouraged its reception, and its persistence in our own time is a menace to a sound assessment of the constructive possibilities ahead of us.

None the less, the rise of capitalism has everywhere brought into being a class of wage-earners whose employment depends on the owners of capital and the working of the price mechanism. Wherever it has flourished, it has drawn the workers together for mutual protection. Before the Industrial Revolution there were isolated cases of trade unions or trade clubs in industries, such as the West of England cloth trade, where cleavage between the aspirations of employer and employee was deepest. Such unions were local and their aims were limited as compared with those of a modern trade union. There was as yet no organized Labour Movement in the modern

sense, embracing the mass of wage-earners throughout the country and fostering a community of policy between workers in different trades While the workshop remained the unit of production, the day-to-day contacts of workers in industry were trivial by comparison with the social intimacies of factory life. That the rapid expansion of the factory system at the end of the eighteenth century should have generated a rapid extension of trade unionism was therefore inevitable.

At first, the State was not actively hostile to such associations, except when they were deemed to be usurping its ostensible functions, or when harassed masters appealed to it to protect them from the "tyranny" of their workers. The offending union was then dissolved by special Act of Parliament. Towards the end of the century opposition to the new unions grew. Naturally employers objected to them, but perhaps the chief ground for opposition was political. The French Revolution had shaken Europe to its foundations. When the *Terror* increased, the prosperous classes of Britain took alarm. Every meeting of workers was potentially a conspiracy. Public discussion contained the presumptive seeds of revolution. Even Wilberforce, the enlightened advocate of slave emancipation, declared that combination was a general disease of our social system In this setting, Parliament proceeded to pass the Combination Law of 1799. In the following year the Act was amended in detail but associations of workers or employers as such remained outside the law.

Before this general proscription of trade unions, the more intelligent and and more highly skilled craftsmen were actively interested in parliamentary reform. At the end of the eighteenth century parliamentary representation was notoriously corrupt and completely out of touch with the changing condition of the country. The distribution of seats bore little relation to the distribution of population. Towns such as Birmingham, Manchester and Leeds had no representation whatsoever, while decaying boroughs with half a dozen electors sent a member to Westminster. Cornwall had 42 borough members, Yorkshire, and Sussex 26, Scotland 14 and Lancashire 12. Besides the borough members, there were 122 county members, 80 from England, 12 from Wales and 30 from Scotland. They, too, represented a mere fraction of the population. For instance, the county of Midlothian had 96 electors, and the whole of Inverness-shire 32. As early as 1776 Wilkes had pointed out that 5,723 persons elected an effective majority of the House of Commons Town government was also grossly unrepresentative All forms of public administration had become the preserve of an oligarchy (Fig. 52).

As the new industrial centres drew people toward them the anomalies increased. The agitation set on foot by Wilkes bore some fruit. Sinecures and pensions were reduced and the authority of the Crown curtailed, but such minor reforms strengthened the power of the aristocracy without yielding anything to the masses. Meanwhile the American, no less than the French, Revolution had deeply stirred men's minds There were in Britain many who looked with approval on the American system of government; and its advocacy by Thomas Paine roused people, some to enthusiasm, some to bitter hatred, when he returned from America in 1787 to preach the doctrines set forth in the Declaration of Independence. An obvious corollary

of man's natural equality was that all men should have equal representation in Government Two years later the Estates General of France reassembled and compelled Louis XVI to sign the Declaration of the Rights of Man, a document similar in principle to the American manifesto. There was encouragement in plenty to strengthen reformers in the belief that France, with her age-old traditions and social arrangements, would follow peacefully in the footsteps of America. The process proved to be anything but peaceful, and many of its British supporters became, in Macaulay's words, as violent in their denunciations as they had once been extravagant in their hopes. In Britain, Burke, who had advocated a progressive policy towards America, turned the full force of embittered criticism against the French Revolution His *Reflections* published in 1790 prompted Thomas Paine to a characteristic defence entitled *The Rights of Man*. At once a defence of the French Revolution and a programme for reform at home, the *Rights of Man* had a deep and lasting influence For years to come it was a beacon to reformers and a terror to governments.

Already face to face with an economic revolution which was rapidly changing the face of the country, piling up towns and crowding operatives into factories, the working classes were caught up in the polemics of the time As usual, the leaders in the new movement were not the sweated unskilled factory workers, but skilled craftsmen, many of whom were as yet untouched by the methods of power production. Typical of the class was Thomas Hardy, a shoemaker from Falkirk. Along with other radical craftsmen he founded the London Corresponding Society Started in 1791, it drew its members mostly from the ranks of the skilled artisans of the metropolis It quickly became one of the most influential political societies in the whole country and the model of many others Its aims were modest, annual parliaments and universal franchise; but its activities excited the utmost alarm in the authorities. Up and down the country the reform movement aroused enthusiasm alike among the working class and the middle class. The latter had their *Constitutional Information Society* with an annual subscription of four guineas A *Society of the Friends of the People* had as its avowed object to check more radical tendencies now in the ascendant

Manchester, Sheffield and Glasgow became centres of agitation. In Birmingham the Tory element, which had wrecked Priestley's laboratories in 1791, succeeded in crushing the movement. North of the Border the reform movement was also lively. The Scottish schools had produced a literate public. Cottar and weaver could read Paine's *Rights of Man*; and an increasing number of newspapers and periodicals fanned the flame of reform. On July 26, 1792, the first Scottish *Society of the Friends of the People* was founded in Edinburgh, soon to be followed by similar societies in Dundee, Perth, Glasgow, Paisley and Kilmarnock. Unlike the London counterpart, largely a middle-class body, the Scottish societies had low subscriptions and attracted weavers, shoemakers, tradesmen, and shopkeepers. Greatly daring, they called a Convention in Edinburgh, representing eighty societies It met in December 1792. At its close a delegate proposed that "all should take the French oath to live or die." Members rose as one man, and took the oath with right hands raised "amid reiterated plaudits "

The interest thus displayed by the artisans and tradesmen class marks the beginning of a consciousness of political destiny. Indeed, as Cole points out, a labour movement was born in the trade union and reform clubs. But the prosperous middle and upper classes did not view with complacency a partnership of the working class in politics. They were horrified. Taking advantage of their panic, inspired by excesses of the French Revolution, the government proceeded to strike a crushing blow at all reform. Thomas Muir, a young Scottish advocate who had played a prominent part in the first Edinburgh Convention, was arrested on his return from France and brought before the notorious Lord Braxfield, Lord Justice Clerk, on a charge of treason. With such a judge sitting and a packed jury, the verdict was a foregone conclusion

"What has been my crime?" declared Muir in his eloquent speech. "Not lending a relation a copy of Mr. Paine's works; not the giving away to another a few copies of an innocent and constitutional publication, but for having dared to be, according to the measure of my feeble abilities, a strenuous and active advocate for an equal representation of the people in the House of the People" (Meikle, *Scotland and the French Revolution*, 1912, 134).

In addressing the jury Braxfield made clear his own views:

"I leave it for you to judge," he said, "whether it was perfectly innocent or not in Mr. Muir, at such a time, to go about among ignorant country people, and among the lower classes of people, making them leave off their work, and inducing them to believe that a reform was absolutely necessary to preserve their safety and their liberty, which, had it not been for him, they would never have suspected to have been in danger. . . . A government in every country should be just like a corporation; and, in this country, it is made up of the landed interest, which alone has a right to be represented As for the rabble, who have nothing but personal property, what hold has the nation on them? What security for the payment of their taxes? They may pack up all their property on their backs, and leave the country in the twinkling of an eye. But landed property cannot be removed."

Muir was found guilty and sentenced to fourteen years' transportation to Botany Bay. Next month Palmer, another reformer, was sentenced at Perth to seven years' transportation.

Meantime a second Edinburgh Convention was in session The authorities promptly arrested several members, including two London delegates, Joseph Gerrald and Maurice Margarot. After a trial before Braxfield they too were sentenced to fourteen years' transportation. Such brutal verdicts merely served to stimulate the movement in Scotland. In England there were also similar arrests, including that of Thomas Hardy, the founder of the London Corresponding Society. After a dramatic trial he was found not guilty, and one might have expected that such a victory would have strengthened the reform movement This did not prove to be so. Everywhere there were now signs of decline In face of the growing unpopularity of France and the determined attitude of the government, the reform societies melted away. In 1794 the Habeas Corpus Act was suspended and the following year witnessed the passage of the first of a series of Acts which

temporarily crushed the movement. A Mutiny at the Nore provided the pretext for further repressive legislation, and in 1799, the year of the first Combination Law, another Act suppressed the *Corresponding Societies*. Thus the century ended in a triumph for reaction. The reform movement, bringing together all the most enlightened elements both in the working and in the middle classes expired, and any form of working-class association was suspected of revolutionary aspirations. None the less, workers still met to discuss their common lot openly or secretly, and many a one, among those who could read, still read his *Rights of Man*.

REACTION AND DEPRESSION

By the Combination Laws of 1799 and 1800 any worker who attempted to form a trade union or even attended a meeting to discuss wages and hours could be sent to prison for three months Nor was this all. Under the Common Law, trade union action of any kind was a criminal conspiracy making those involved liable to imprisonment for several years. Ostensibly, the law applied to employers. In fact it did not operate against their interests. Many cases of prosecution of workers have come to light, but none of employers. Moreover, the following letter shows how easily employers could act informally though very effectively. It is from one Scots coal-owner to another, the date being July 14, 1809.

"What kind of terms have you been on with the folks here about employing each others men, has there been an understanding, if so do you wish it continued; or not, do you wish it to be understood that we should not employ each others men although they may be free or even have a line to that effect unless that line carried a recommendation from the one Company to the other to employ the bearer? This would most effectually prevent the men taking advantage of our situation, and they would not so easily leave the one work if there was a difficulty in obtaining work at the other. Pray say what you think of this and I will take the earliest opportunity of waiting on you to have this understood

"All the coal masters about Glasgow and in Ayrshire have lowered the price of colliers' wages. I have only been hinting such a thing here. . . .

"I am certain we ought to cheapen the price of coal working and make them do more work, and we cannot win unless we agree"

For a quarter of a century the Combination Laws remained on the Statute Book. Despite this, a few trade unions, mostly in the old trades hardly touched by the factory system, carried on an open existence. Such unions of skilled craftsmen were generally moderate in aims and methods. So long as they remained more or less quiescent, employers therefore found it convenient to negotiate with them on trade matters In the new factory industries, however, prosecution for conspiracy at common law or under the Combination Laws was general. Those that survived did so in secrecy, holding their meetings at night and burying their records in the ground To ensure secrecy they therefore enforced elaborate oaths on their members. There was always some doubt about whether the Combination Laws applied in Scotland. They made no reference to the country, nor were they specifically

designed to suit legal institutions very different from those of the English. Nevertheless, combinations to raise wages or check reductions were suppressed in various ways before 1799, as, for instance, by the Incorporated Trades or the town councils acting on their behalf In the early part of the nineteenth century, the Common Law was so modified by Scottish judges as to make trade unions illegal.* The most famous case was that of the Scottish weavers, prosecuted in 1812 for engaging in a strike designed to compel the employers to pay the legal wages fixed by the magistrates under the Stuart Act of 1617, the Scottish counterpart of the English Statute of Apprentices of 1563. The whole strike committee was arrested and the leaders sent to prison for terms varying from four to eighteen months. In the following year Parliament repealed the statutes giving justices power to fix wages.

The end of the Napoleonic Wars brought no relief to the workers Instead of the good times they had expected, there was unemployment and depression, the hated Corn Law and dear bread. Disillusioned and disappointed, they eagerly listened to the appeal of the political radicals. William Cobbett started a *Weekly Address to Journeymen and Labourers* at 2d a number. This had amazing popularity. Determined to nip the movement in the bud, the Government adopted a repressive policy. Following the Spa Fields Riots the Habeas Corpus Act was suspended. Measures against Corresponding Societies were reinforced. *Agents provocateurs*, headed by the notorious Oliver the Spy, were sent out to find or manufacture evidence of insurrection. There were many arrests When a great radical meeting in Manchester was broken up by the military, eleven people were killed and many hundreds wounded In spite of public outcry against this outrage, the Government congratulated the officer in charge and passed more panic legislation, known as the *Six Acts* In effect, these prohibited all political meetings, increased the tax on newspapers, and in other ways suppressed attempts to propagate doctrines of reform. Of the famous episode at Peterloo, Carlyle said in 1843,

"The number of the slain and maimed is very countable, but the treasury of rage, burning hidden or visible in all hearts ever since is of unknown extent." (*Past and Present.*) (Fig 53)

By the twenties panic had subsided and there were now signs of trade revival Through astute wire-pulling by Francis Place, a Charing Cross tailor, and Joseph Hume, a radical M.P., the Combination Laws were repealed in 1824 This was a great working-class victory. Trade unions, free at length from statutory and common law restrictions, could operate openly. Many individuals, like Place, who helped to secure this outstanding victory, believed that removal of the restrictions would also remove the inclination to combine. So trade unions would disappear "All will be as orderly as even a Quaker would desire," said Place Events proved him to be wrong Great trade union activity and numerous strikes and lockouts followed repeal Employers and Parliament took alarm. In 1825 there was an amending Act, withdrawing immunity from prosecution under the Common Law

* See "The Law of Combination in Scotland," by J L. Gray, *Economica*, December 1928.

doctrine of conspiracy. It also defined two new offences—molestation and obstruction. Trade unions could still be formed, but if they resorted to the strike they were liable to prosecution as conspiracies and for molesting or obstructing the employer in his business

Despite these legal disabilities many trade unions were organized, some of them planned at the start on national lines. Such were the Steam Engine Makers (1824), the Journeymen Steam Engine Makers (1826) and the Friendly Society of Carpenters and Joiners of Great Britain. The high hopes aroused were unfortunately dashed to the ground when 1825 ended in financial panic and widespread commercial distress. For the next four years, with ups and downs, unemployment was rife, and the evident futility of sectional disputes in such circumstances led the workers to rally once more to the reform movement.

The growth of industrialism was now creating an economically powerful middle class ill-disposed to acquiesce in a political system dominated by the landed interest. It complained bitterly that the aristocracy governed the country in its own interest. For example, the Corn Laws put money into the pockets of the landlords at the expense of industry, while manufacturing costs were kept high by heavy taxation Political institutions were now grotesquely out of gear with the economic framework. After the Napoleonic War it therefore seemed that capitalist interests would throw in their lot with radical politicians and the working class, to the equal disadvantage of the aristocracy and the two traditional parties Some of the leaders of politics favoured buying off opposition by more attention to the needs of industry and new forms of commercial enterprise. Accordingly, Huskisson played a leading part in removing import and export duties and in freeing commerce from the old Navigation Act restrictions Others were prepared to consider political reforms sufficient to ally the middle class to the aristocracy. As it happened, concessions to capitalist interests simply strengthened the case for change, and as the twenties moved to their close the movement, supported by the working classes, gathered momentum.

In 1830 the Birmingham Political Union, including in its membership many working-class members, was founded. It was the forerunner of similar unions in other towns Disrupted by the Catholic Emancipation Act of 1829 the Tory government fell. While France and Belgium were carrying through successful revolutions in the following year, a Whig government returned to power Fanned by unemployment and trade depression at home, as by revolution abroad, the demand for reform of government became insistent and irresistible The Whigs produced a bill sweeping away the system of rotten boroughs, redistributing seats in accordance with population and extending the franchise to practically all the middle class. Great excitement followed the course of the bill It met with defeat in the Commons, but was reintroduced after a general election, to be defeated in the Lords. After a change of ministry the bill finally became law in 1832 "Ten-Pound Householders" in the boroughs and "Forty-Shilling Freeholders" in the counties and tenant farmres who paid £50 or more a year in rent received the vote. But the mass of the people still remained unenfranchised. Five out of every six male adults were still without a vote

ROBERT OWEN AND THE TRADE UNIONS

Having secured the franchise in 1832, the middle class dropped out of the movement for reform, leaving a working class disappointed and disillusioned in its isolation. For two or three years Britain was nearer revolution than it has ever since been Inevitably criticism would sooner or later be directed against an economic system which prided itself on its ever-increasing productive capacity, while permitting widespread poverty and unemployment. Inescapably one asked, who was benefiting from the tremendous acquisition of wealth resulting from the industrial revolution? William Thompson, John Gray and Thomas Hodgskin built on Ricardo's theory that labour is the source of value, dividing economic society into two groups—a capitalist class, the exploiters, and labour, the exploited. Such theories anticipate something of what Marx had to say, but at the time had little influence on working-class aspirations A man who had the widest and most practical influence on the working class at this time was Robert Owen.

Owen had purchased the New Lanark Cotton Mills from his father-in-law in 1799. Alert to the possibilities of power-driven machinery, he made his mills a model of large-scale production Unlike others of his kind, he realized that the human material he employed was just as valuable as inanimate machinery, and devoted boundless energy to giving his workpeople good conditions He asserted passionately that men's characters are moulded by their environment. By his own practice he was able to show that success in business is at least compatible with decent working conditions. Accordingly, his factory soon became famous; and people from far afield came to see for themselves how a well-run business could profitably provide reasonable working conditions, decent houses, educational facilities, and village life for its employees. During this stage of his career, Owen's achievements evoked widespread admiration and respect. When the end of the War came, plunging the country into unemployment and depression, he became more critical of an economic system which tolerated such chaotic conditions, and urged the Government to undertake a New Deal policy of public works for the unemployed and statutory improvement of living standards To this end he pressed Pitt to pass a factory law. A bill eventually reached the Statute Book, first of its kind; but it was a mere shadow of what Owen had proposed. Invited by the County of Lanark to advise them on unemployment, he produced a report in 1820. This noteworthy document contains a novel statement of his views on co-operative communities and a devastating criticism of the existing economic order (Figs. 54 and 55)

While others were obsessed with the claims of political reform, Owen concentrated his interest on economic reform. More than any of the early parents of socialism and co-operation he offered truly constructive plans far ahead of the notions of his time. His critique of competition and the profit motive as the regulator of production is more incisive than that of predecessors or contemporaries. He first appealed to the governing class, but with little success. Naturally his drastic proposals did not attract them. With the moral assurance which is the hallmark of our Puritan heritage, he then set off to America, where at New Harmony he established a model co-

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operative community. Later on, he established others in his Homeland—at Orbiston in Lanarkshire, at Rahaline in Ireland, and at Queenwood in Hampshire. None of these achieved lasting success, but the challenge of co-operation as a practical alternative to competition had in it the explosive power of a delayed-action bomb, and the prosperous classes heard the whine of its descent. Factory operatives, who hated the conditions of discipline and power production, and the older type of skilled craftsman, who saw his trade threatened by the factory system, rallied to the gospel of Owen, and societies for propagating the doctrine of co-operation, for applying it to industrial production and for organizing distribution on a co-operative basis came into being.

The impact of Owen's ideas on the new trade unions was dramatic It inspired the hope of building up industrial unions of nation-wide scope with the eventual aim of taking over the actual running of industry itself. In the development of the syndicalist idea the Operative Builders' Union which came into prominence in 1832 played the leading role It enlisted members throughout the length and breadth of the country, and set as its object not merely bargaining about wages and conditions but assuming the direct control of the industry. The cotton spinners formed another union with similar aims. At the right moment these vast national unions were to dispossess the employers and run the business as a co-operative concern. Most famous of them all was the Grand National Consolidated Trades Union In its short career it enrolled a million members, drawn from all sorts of occupations

During the years 1829–34 there was intense activity in the trade union world. The country seemed to be on the verge of revolution, but the trade unions were too unwieldy and loosely organized, so they were easily broken. Employers dealt them a severe blow by recourse to a new device, the "document," an undertaking to repudiate trade unionism signed by an employee as a condition of his employment. Disruption of trade unionism was completed by prosecution of the Dorchester Labourers in 1834 At this time it was the common practice of unions to impose oaths of secrecy on their members This practice, prohibited by an unrepealed act of 1797, was a legacy of the days when all trade unions were regarded as criminal conspiracies. The agricultural labourers of Tolpuddle in Dorsetshire, who had formed a branch of the Grand National, followed this usual trade union custom They were prosecuted. The savage sentence of seven years' transportation had a shattering effect Before the end of the year the Grand National and the Builders' Union had disappeared. The aspirations of the British working class found a new focus in the Chartist movement

CHARTISM

Chartism was itself a gigantic protest against the social conditions under which the mass of the people lived and worked. Its causes lay deep in the social structure of the country—unemployment, low wages, long hours and wretched urban conditions. The programme of the Chartists was a moderate and sensible political programme which had no hope of acceptance from

the House of Commons. The great trade union schemes had collapsed in the early thirties amidst prosecution and persecution. The reformed House of Commons passed a factory law in 1833. It introduced sound innovations, notably the appointment of factory inspectors; but it did not go far to meet the demands of the factory operatives. Disappointed and bitter against the reformed Parliament, the working population of Yorkshire and Lancashire persisted in agitation for further concessions The cry was now for a ten-hour day.

Then came the hated Poor Law of 1834. Down to this time, poor relief had been given on a family sliding-scale basis. The new Act made entry into the Dickensian workhouse a condition of relief of the able-bodied. The poor law issue thus came to a head as trade union agitation went into a decline. Bad trade caused widespread unemployment in 1836 Up and down the country the working class was disillusioned, disappointed and bitter. A group of London radicals met and founded the London Workingmen's Association. William Lovett was appointed secretary. In 1837 they drew up the Petition which contained six famous points—universal male suffrage, vote by ballot, equal electoral areas, abolition of the property qualification for members of Parliament, payment of members and annual parliaments. They set out on a campaign throughout the country for support, and speedily found that their programme provided a rallying-point for the tremendous mass of discontent which existed in the country. Soon more than a hundred societies were formed in other parts of the Kingdom. The stimulus of trade depression revived the Birmingham Political Union, under the leadership of Thomas Attwood, a local banker and member of parliament. Attwood advocated the abolition of the gold standard and the establishment of a paper currency to be regulated according to the state of trade. In 1837 the union adopted a programme of parliamentary reform. This brought it into line with the London Workingmen's Association. Throughout the country there was widespread enthusiasm, when Lovett issued the Six Points in the form of a draft bill called the People's Charter, it knew no bounds. The chartist movement was formally launched at a gigantic meeting at Newhall Hill, Birmingham.

"For the next three years," says Hovell (*The Chartist Movement*, Manchester, 1918, 107), "the forces of working-class discontent, of popular aspirations and enthusiasms were concentrated as they had never been concentrated before under the standards of the National Petition and the People's Charter."

A plan was adopted to hold a Convention of the Industrious Classes. Huge meetings were held all over the country to elect delegates. The Convention met in London on February 4, 1839. The movement thus set afoot was too vast to be controlled by either of the bodies which had equipped it with a programme. Moderate leaders took a back place Henceforth the stage was held by fiery revolutionaries like Feargus O'Connor and Joseph Stephens. The first convention in London dissipated time over discussions on the merits of physical and moral force as an instrument for achieving a programme which united its supporters by nothing more substantial than a

common sentiment of discontent. There was no agreement about methods to be adopted for remedying their grievances. Some like Lovett hoped a free franchise would inevitably force Parliament to implement the economic and social regeneration of society. Others, like O'Connor, believed that political power could be secured by force alone. By May 7th the Convention had completed the first part of its work by handing over to Attwood the Great Petition, containing, it was said, 1,200,000 signatures. Thereafter the Convention withdrew to Birmingham.

Meantime a considerable change had taken place in Birmingham. Alarmed at the dominating influence of those who advocated physical force, the moderate element began to withdraw. When the Convention reached Birmingham a cold reception awaited it By order of the magistrates the use of the Bull Ring was refused. The Chartists defied the magistrates' order. When London police were drafted in to maintain order, the situation became ugly Knowing that their petition would be rejected by the House of Commons, the Chartists were already making plans to use force. It was proposed to hold a Sacred Month, during which chartists would deal only with chartists' shops and would close their accounts with the banks The inevitable occurred on July 12, 1839, when the Commons rejected the Petition by 235 votes to 46. The Government had taken elaborate precautions against insurrection. The police carried out wholesale arrests, and the movement went into decline. The "hungry forties" brought a revival, and a Second Convention was held in London in the depths of the depression during 1842. Once again the petition was presented, once again rejected. Thereafter the movement disintegrated rapidly. There was a final rally in 1848, when trade was very depressed It came to nothing. As an active movement, Chartism was dead.

From the start, the movement had little chance of success. At a time when industrial capital was going from strength to strength, when production was mounting steeply, with imports and exports increasing at a pace that astonished the world, it is inconceivable that a middle class, now safely in the government saddle, would be disposed to make political concessions to the workers. Chartism had grown out of depression and bad conditions. Improved trade in the later forties, and successive minor concessions to social reformers, such as the Mines Act (1842), the Factory Act (1844), the Ten Hours Act (1847), and finally the repeal of the unpopular Corn Laws, sufficed to assuage the discontent which had supported the demand for drastic political changes.

THE NEW INDUSTRIAL ORDER

By the middle of the century the workers had become acclimatized to capitalism Thus a characteristic of the forty years period between 1845 and 1885 is the efforts of the skilled workers to consolidate their position within the new industrial order. There is little or no talk of co-operative community life, of socialism or of revolutionary methods A new alignment was taking shape Liberalism and Labour had come to terms. The aristocracy of Labour was now indoctrinated with self-help, with the virtues of abstinence, in

short with the ideology of individualism and *laissez-faire* Such acceptance of things as they were was partly the result of the disasters to which the Owenite trade unions and Chartism had succumbed, partly a consequence of the propaganda of such bodies as the *Society for the Diffusion of Useful Knowledge*. Such as it was, the educational machine was working overtime to serve the ends of the orthodox economic and social doctrines of the time. Accordingly, the working class were fully indoctrinated with the benefits of private enterprise and the efficacy of the forces of supply and demand. If a shortage of supply meant high prices, wages could presumably be increased by restricting numbers employed in a trade; and this would surely be more effective than strikes. Such ideas were not confined to the pamphlets of the Society for the Diffusion of Useful Knowledge. They found their way into trade union speeches and journals. The Stonemasons' Central Committee, in their Xmas Circular of 1845, caution their members "against the dangerous practice of striking. . . . Keep from it," they urge, "as you would from a ferocious animal that you know would destroy you." The *Flint Glass Makers' Magazine* of 1850 advocated "the education of every man in our trade, beginning at the oldest and coming down to the youngest. . . . If you do not wish to stand as you are and suffer more oppression," it enjoined its readers, "we say to you get knowledge, and in getting knowledge you get power. . . . Let us earnestly advise you to educate; get intelligence instead of alcohol—it is sweeter and more lasting."

By 1850 a new spirit was thus permeating the Trade Union movement. It shows itself in the workers' journals, and in a new type of union that was now created. The new type of union was a national organization of skilled men in the *same craft*, demanding high subscriptions and providing ample friendly society benefits for its members The most important and the earliest of such unions was the Amalgamated Society of Engineers (1851). It was an amalgamation of many closely allied organizations, embracing severally engineers, machinists, steam engine makers, smiths, millwrights, pattern makers, etc. Its creation was due to the work of two men, William Allan and William Newton, and to the progressive policy of the Journeyman Steam Engine and Machine Makers' Society. The weekly subscription was a shilling. Before the year was out it had 11,000 members Ten years later its accumulated funds amounted to £73,000. It was the model for others, such as the Amalgamated Society of Carpenters and Joiners. Unions of the "new model" employed full-time secretaries, able to devote themselves to problems of organization and policy. They had headquarters in London, where the permanent officials could meet and consult on matters of common interest. The *Junta* of London officialdom constituted a sort of cabinet of the trade union movement. Meantime the workers of other towns were coming together in newly-created trades councils. The earliest ones were Scottish, notably the Aberdeen Delegated Committee of Sympathy, founded in 1846. Glasgow had a General Union of Trade as early as 1833, but most of the local trades councils took shape about 1860, as did the influential Trades Council of London on which sat William Allan, the Engineers' Secretary, and Robert Applegarth, the Carpenters' Secretary. Though a conference of trade unions held four years earlier might more properly be

regarded as the first Congress, the Trades Union Congress dates from a conference held in Manchester in 1868.

The year 1867 is memorable in the history of the labour movement. A Reform Act gave the vote to the working classes in the towns. For some years previously a popular movement to extend the franchise had been growing, under the leadership of John Bright of free trade fame. There was nothing spectacular or revolutionary about this, but its existence is a signpost. Men of both parties in the House of Commons had now come to realize that this concession could no longer be withheld. Twice was a reform bill introduced, and twice defeated. Outside Parliament, the National Reform League, supported in its demonstrations by trade unionists "great in numbers and most inspiring in their silent united strength," was a portent that could not be ignored. The question at issue was not which party should oppose the claim of the working people, but which should reap the benefit of conceding it. Disraeli introduced a bill in 1867. In its passage through the Commons it was much amended, but when it reached the Statute Book the mass of the adult working population of the towns found themselves enfranchised. The country labourer had to wait until 1884.

The year 1867 is also noteworthy because of a famous court case known as *Hornby v. Close*. The Boilermakers' Society took proceedings against the treasurer of its Bradford Branch for wrongfully withholding £24 The magistrates, supported by the Court of Queen's Bench, declared that a trade union being "in restraint of trade" was an illegal body. Therefore it could not take proceedings in a court of law. The decision came as a bombshell to the trade union movement. It was the general belief that the Friendly Societies Act of 1855, under which the larger trade unions had registered, automatically gave such bodies the right to proceed summarily against defaulting officials. That the existence of responsible bodies such as the Amalgamated Society of Engineers, which administered considerable friendly society benefits for its members, should be regarded as contrary to public policy, and that they should have no means of redress at law against defaulting officials, was equally surprising and intolerable It called for immediate remedy.

The decision came at a moment when the Government had decided to set up a Royal Commission to inquire into the position of trade unions. There had been outrages in Sheffield, allegedly perpetrated by small unions. Very soon there was a public outcry against trade unions in general. Some employers, who found the operation of unions irritating and infringing what they regarded as their own prerogatives, wished to restore the Combination Laws. The case for the unions was ably presented at the instigation of Applegarth and Allan, who made much of their friendly society activities, showed that the larger unions had nothing to do with the Sheffield outrages, and condemned extreme tactics. They stated the case for removing the taint of illegality from trade union activity in opposition to that of the employers, who almost unanimously opposed the principle of collective bargaining as "an unwarrantable encroachment" on their rights. The majority report of the Commission was a negative document It did not propose any change that would make the position of trade unions worse, but its

positive recommendations, hedged about with many restrictions, were of little comfort to trade unionists There was a minority report, signed by the Earl of Lichfield, Thomas Hughes and Frederic Harrison, which was naturally more favourable It contained detailed suggestions for the amendment of the law.

After much hesitation a Liberal Government accepted Harrison's proposals. In the Act of 1871 the taint of illegality was removed from trade unions. Henceforth no trade union was to be regarded as illegal merely because it was in restraint of trade. But trade unions were not incorporated and this appeared to imply that they could not be sued in a court of law. Complete protection was given to their funds by vesting them in the hands of trustees. In another Act, the Government so extended the criminal law as to make strike action almost impossible.

Trade unionists, however, were not likely to accept this situation without protest Now that the working class in the towns were enfranchised they were able to use their political influence, and it is a measure of their strength that in 1875 a conservative government repealed the obnoxious Act of 1871, and replaced it by the Conspiracy and Protection of Property Act, which legalized picketing and declared that no action by a trade union would be regarded as a criminal offence if such action could be done legally by an individual Henceforth trade union activity could be carried on without the constant threat of the law courts. Trade unionists had much reason to feel satisfied with the legal victories they had gained in 1871 and 1875.

THE CO-OPERATIVE MOVEMENT

In 1844 some poor weavers in Rochdale, Lancashire, launched the modern consumers' co-operative movement when they opened their small shop in Toad Lane. The Rochdale pioneers laid down the principles on which co-operative enterprise could be conducted. There had been co-operative shops before this time, and indeed before the time of Owen As early as 1769 the Weavers' Society of Fenwick near Kilmarnock founded a co-operative store. The following is an extract from one of their documents, dated November 9, 1769.

"This present Day it is agreed upon by the members of our society to take what money we have in our Box and buy what Victwal may be thought Necessar to sell for the benefit our society And the mannagers of our society may borrow what money They think Proper for that End and purpose And when the interest is paid of what money yow borrow and the men received their wages for buying and selling thes Victwals we Deal in the society will both reap the benefit and sustain the loss of them, and If any member of our society Pay not what Quantity of Victwals he receives at the end of four weeks, If the mannagers require it of him, Neither him nor his shall have any more right to our societys Victwals If he be found buying Victwals from any other and leaving the trade in Debt of the same according to the option of the society." (*History of Co-operation in Scotland*, by W Maxwell, Glasgow, 1910, 47)

In reality, the earliest society with a continuous history is the Lennox Victualling Society, dating from 1812. There were many other societies

which were short lived. Some of them paid a dividend on purchases, but it was the Rochdale Pioneers who popularized the dividend, and thereafter all societies followed their example. They started with a capital of £28. Within ten years their membership was 1,400 and their turnover £45,000

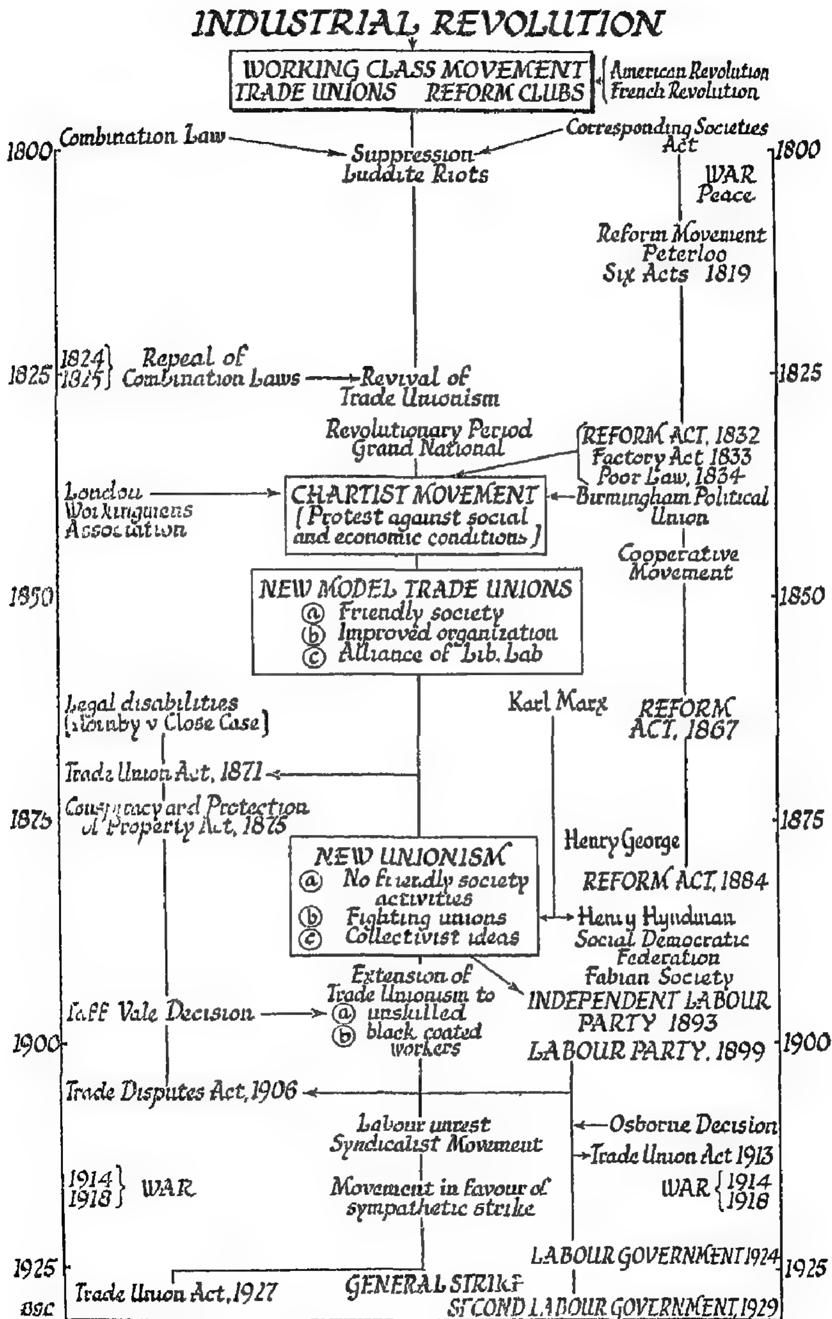
Like those sponsored by Christian Socialists about the middle of the century, most efforts to establish co-operative productive societies or co-operative workshops met with little success. The movement concentrated more and more on consumers' interests. This was inevitable. Besides a dividend on purchases, it held out other immediate benefits for working people, not the least of which were the honesty of their dealings and the quality of the goods sold. In the sixties co-operation spread like wildfire through the industrial districts of the country, and all the societies thus founded planned their business on the lines laid down by the Rochdale experiment.

Co-operative enterprise appealed to the individualistic liberal of the time. So the movement received valuable support from some members of the middle class. To Maurice and Kingsley, who had founded the Christian Socialist movement, belongs the credit of securing several important acts (1852–62), which together conferred on co-operative enterprise the advantages of being able to sue at law, to have limited liability and to hold the shares of one another. This last provision made possible the creation of Wholesale Co-operative Societies. Hitherto the great obstacle in the path of the co-operative society had been the opposition of middlemen, whose interests naturally lay with private enterprise. The English C.W.S. was founded first in 1863, and in 1868 the Scottish C.W.S. Members of the Wholesale Societies were the individual societies. They received dividends on purchases as their own members did.

An outstanding feature of the last forty years or so of the century was the phenomenal growth of these great co-operative trading concerns. The English C.W.S. started with a biscuit factory near Manchester in 1872 and in 1881 the Scottish C.W.S. decided, "with due caution and careful consultation," to establish a small factory for making shirts. Before the close of the century they had established many such factories for the manufacture of boots and shoes, soap, cloth, furniture and other products. They had bought up fruit and dairy farms, coal mines, ships, tea plantations in Ceylon, as well as oil and cocoa properties in West Africa. Owen's name was still remembered, if not revered; but his plans to replace capitalism by a co-operative commonwealth had been watered down past recognition. Co-operation had become essentially a consumers' movement, working within the capitalist system, following many of its methods, and attaching to itself dividend-hunters with the outlook of shareholders in a commercial enterprise.

THE NEW UNIONISM

In the eighties working-class unity progressed on a fresh path. The two significant features of this new period are, the spread of socialist ideas and the extension of trade union organization to unskilled and blackcoated workers. Since the days of Owen's ambitious schemes socialism had lost ground in Britain, while gaining it steadily on the Continent. The trade



Time Chart 14· The Working Class Movement

unions had concentrated their efforts on improving organization and developing friendly society activities The unions were becoming highly respectable and pacific organs of the wage-earners, more especially the skilled, within the capitalist system They did not aim at revolutionary changes. They accepted the economic system under which they lived; and they were content to strive to improve their lot within it. They subscribed to the creed of individualism On the whole they were staunch supporters of Victorian liberalism.

In the last twenty years of the century a profound change of outlook is apparent. Official trade union opinion, critical of the old political and economic beliefs, was discarding individualism for socialism. The reasons for this radical change of outlook were partly the infection of Continental ideas to which the working class lent a ready if critical ear, partly also the economic conditions of the time. While the new model trade unions were going from strength to strength with implicit faith in individualism, the creed of socialism, as expounded by Karl Marx, was gaining ground abroad.

Marx himself did most of his famous writing in London, where he was able to study at first hand the progress of capitalism in the country where it was most highly developed. He was impatient of the "utopian" socialism of Owen in Britain and of Saint Simon and Fourier in France. His great achievement was to give an analysis of the evolution of capitalism showing its inherent instability In several ways his forecast has not been borne out: for example, the increasing misery of the working class and the total disappearance of the *petite bourgeoisie*. Still, the surprising thing is that he has been so near the mark about matters on which the classical economists have been consistently wrong.

While Marx was writing in London he had practically no influence on the trade unions. His International Workingmen's Association, founded in London in 1864, attracted most of its supporters on the Continent The task of popularizing Marx's theories in Britain was then taken up by Henry Hyndman, a radical who conceived the notion of staging a revival of chartism In 1881 he founded the Democratic Federation, at first simply a radical body. Within a few years it adopted a definitely socialist programme. Hyndman got to know Marx personally, and was profoundly influenced by his theories. His book, *England for All*, published in 1881, was in part based on Marxist teaching It came at a propitious moment, when Henry George's *Progress and Poverty* was widely read in Britain and America. This was a forceful book. It had a message for the man in the street. It shook the reader out of the torpor into which radicalism had fallen since the collapse of chartism. George set out to show the significance of urban rents. They were, as he argued, a social by-product which owed nothing to the activity of the particular landlord who possessed the soil His clear and vigorous presentation of the subject gave the masses a clear appreciation of the nature of rent and the implications of the private ownership of land, though it was no part of his intention to encourage the spread of collectivist ideas. His sole remedy for social grievances was a *single tax* on rent. Inspired by Marxian teaching, Hyndman and his followers extended the scope of the discussion Henry George had provoked to public ownership in general

This was a complete breach with *laissez-faire* liberalism; and the seed thus planted fell on fruitful ground. The great period of Victorian prosperity had come to an end in 1873. Then came a Great Depression which lasted, with certain ups and downs, until 1896. It required little persuasion to convince wage-earners that unemployment is not due to workshies and that poverty is not necessarily the result of improvidence. Everywhere there was now abundant evidence of vast accumulations of wealth in which the working class had little share. Real wages had increased while employment was available; but even skilled artisans had to face a hard struggle when deprived of employment and when they succumbed to ill health or old age While the Victorian individualist commended the merits of thrift and declaimed against workers who had not saved sufficient to maintain themselves in old age, socialists could give a satisfying explanation of the *impasse* in which the unemployed, the sick or the aged worker found himself. Declaring that the separation of the worker from the means of production was a process approaching a consummation destructive to capitalism, that neither perseverance nor foresight could guarantee the most gifted worker a future as an employer; and that so-called overproduction was merely the corollary of under-consumption, the Marxist theorist could put a case which was more in touch with the realities of working-class experience than the sophistries of the *Society for the Diffusion of Useful Knowledge*

Hyndman and his co-workers stimulated the workers and helped them to think of industrial and political problems in a new way, but they did not win many converts to orthodox Marxian theory. In conformity with the practical bent of his national tradition, the British trade unionist adapted his socialism to suit the conditions in which he lived. The following extract from the Annual Report of the Boilermakers' Trade Union shows the viewpoint of the trade union leader:

"There are to be seen thousands of idle men vainly seeking for an honest day's work The privation that has been endured by them, their wives and children, is terrible to contemplate. Sickness has been very prevalent, whilst the hundreds of pinched and hungry faces have told a tale of suffering and privation which no optimism could minimize or conceal. Hide it—cover it up as we may, there is a depth of grief and trouble the full revelations of which, we believe, cannot be indefinitely postponed The workman may be ignorant of science and the arts, and the sum of his exact knowledge may be only that which he has gained in his closely circumscribed daily toil, but he is not blind, and his thoughts do not take the shape of daily and hourly thanksgiving that his condition is not worse than it is. . . He sees the lavish display of wealth in which he has no part. He sees a large and growing class enjoying inherited abundance. He sees miles of costly residences each occupied by fewer people than are crowded into single rooms of the tenement in which he lives. He cannot fail to reason that there must be something wrong in a system which effects such unequal distribution of the wealth created by labour" (Quoted Webb, *The History of Trade Unionism*, 1920, 378)

The trade unionist wanted to deal with his immediate problems in a practical way. Theoretical discussions of the class struggle and revolutionary methods made no appeal to him. The obvious way to get redress, he thought,

was through Parliament. In 1884 the Democratic Federation became the Social Democratic Federation to put forward a definitely socialist programme as a parliamentary issue. An early reaction from orthodox Marxian teaching took shape in the Fabian Society, founded in 1884 by a group of young intellectuals including Sidney Webb, Bernard Shaw and Graham Wallas. Their title, taken from the Roman dictator Fabius Cunctator, the "delayer," signalizes their native belief in the "inevitability of gradualness." They rejected the Marxian theory of value in favour of the Ricardian theory of rent, going farther than the land reformers of the sixties and insisting on the evident, but at that time novel proposition that industry as well as land produces unearned increment, appropriated by the idle shareholders. Socialism, as they expounded it, meant the organization, ownership and control of the necessary industries of the country by public authorities, and therewith the appropriation of all unearned increment for the common good.

Meantime there were rumblings among the ranks of the unskilled and lowest paid workers. So far trade unionism had gained its strength from the support of the skilled workers High subscriptions and friendly benefits had made their unions pursue a cautious and conservative policy. The underdog was still unorganized—the sweated worker of the East End, the casual labourer recruited from the flotsam and jetsam of life. The eighties saw a rude awakening A first shock came in July 1888. Under the influence of an article on sweated conditions by Annie Besant, about 700 unorganized girls engaged in match manufacture came out on strike for a fortnight. Supported by funds raised by the public, the girls were enabled to enforce their demands. In the following year there were greater victories for the unskilled worker. In May 1889 London gasworkers organized the *Gasworkers and General Labourers' Union*. Two months later they presented a demand for an eight-hour day and the employers agreed without a strike. Such a triumph naturally encouraged the unskilled in other industries, especially in dockland which employed the roughest, most degraded and most sweated workers. In 1888 Ben Tillett, himself a labourer, formed a small *Tea Operatives and General Labourers' Union*, but the mass of the dockers were still completely unorganized, when a dispute occurred at the South-West India Dock on August 12, 1889. Led by Tom Mann and John Burns, a small-scale stoppage of work fanned out and became the Great Dock Strike for sixpence an hour. There were now feverish efforts to organize the Dockers' Union. The West End of London was shocked to see almost endless processions of ill-fed, ill-clothed and degenerate humanity bearing banners marching to Hyde Park. Subscriptions to maintain the strikers poured in. Finally, Cardinal Manning and Sydney (afterwards Lord) Buxton were accepted as mediators. Nearly all the dockers' demands were conceded.

At this moment of achievement, Charles Booth's first report on *Life and Labour in London* appeared Booth, a wealthy shipowner, carried out at his own expense a vast social survey into conditions in London. The results were startling Thirty-two per cent of the whole population, and in some districts over 60 per cent, were living in a state of chronic poverty. Coming as they did when many Londoners were for the first time actually seeing sweated workers, such revelations created a sensation. The success of the

dockers was thus accomplished in a propitious setting, and it gave a great fillip to the organization of the unskilled. In the textiles, in mining, in agriculture and on the railways old unions were revived or new ones formed. This remarkable expansion of trade unionism introduces a new tradition Subscriptions were low and friendly benefits few. The old unions had new life infused into them, and their membership now grew by leaps and bounds Among eleven large unions in the shipbuilding and metal trades membership rose from 115,000 in 1888 to 155,000 in 1891. That of ten building unions rose from 57,000 in 1888 to 94,000 in 1891. Figures for the Miners' Federation membership rose from 36,000 in 1888 to 147,000 in 1896. Meantime new trades councils sprang up like mushrooms.

The older and more conservative trade union leaders who formed the inner cabinet of the trade union movement had themselves to bow to the storm Such men as Tom Mann and John Burns, who had behind them thousands of unskilled men, compelled the attention of the aristocrats of labour They could not be dismissed as socialist revolutionaries. Gradually they, and those who thought like them, gained the upper hand in the Trades Union Congress and the older leaders had either to come into line or to retire The new trade unionists gained support for a practical programme of social legislation, such as the legal regulation of hours and conditions of employment They stood for constitutional change and were prepared to work through parliament and the local authorities. Meantime the character of socialist propaganda was changing

The Social Democratic Federation held aloof from the trade unions, bearing apocalyptic witness to the inevitable cataclysm in which capitalism would collapse. But they were wrong. At the very moment when they were most expecting the revolution, the trend of British socialist thought was from revolutionary to constitutional methods. The resignation of such leaders as Tom Mann and John Burns from the Social Democratic Federation and their concentration on the work of building up trade unionism and working for reform through constitutional channels signified the end of its effective appeal Thereafter the characteristic feature of the British Labour Movement has been its staunch faith in parliamentary procedure The next move was inevitable An independent political party now competed with the S D F. for the loyalty of the socialist convert. In taking the momentous step which led to its beginning, Keir Hardie, a Scottish miner, played a leading role. At first a liberal, he became convinced that the hope of the working class lay in direct representation through a party of its own. In August 1888 he helped to start the Scottish Labour Party, of which he became secretary with R B Cunninghame Graham, a Liberal M P turned socialist, as Chairman It was the first labour party in Britain, and though its programme was largely liberal, it advocated the nationalization of the railways and the banks The first Labour M P was elected for an English constituency. The Election of 1892 returned three Labour candidates—John Burns (Battersea), J. Havelock Wilson (Middlesborough) and Keir Hardie (South West Ham) They had the support of the Fabian Society, which had grown steadily in strength and influence since its foundations

Thus greatly encouraged, steps were taken to found a national organization

In 1893 a conference met at Bradford under the chairmanship of Keir Hardie. Thereat all sections of the trade union and socialist movement were represented. Bernard Shaw was one of twelve delegates from the Fabian Society. The S.D.F. sent five, and Robert Blatchford, of *Clarion* fame, was there, too, with delegates from the Scottish Labour Party The outcome was the Independent Labour Party, from the first a socialist body, setting forth as its explicit object "the collective ownership and control of the means of production, distribution and exchange." Its immediate political programme embraced the legal eight-hour day and State provision for the unemployed, the sick, widows and orphans Branches were speedily formed in other parts of the country and soon there were 280 of them, but the high hopes of the leaders of the new party were not immediately realized. Of the three Labour members of Parliament, Keir Hardie alone accepted its policy. The older Unions were entirely apathetic. Nevertheless, the trade union members of the I.L.P., who were mainly drawn from the new unions, steadily worked within the Trades Union Congress for support. At the Congress of 1899, it was decided to call a conference of trade unions, co-operative societies and socialist organizations to promote Labour representation in the House of Commons It met in February 1900 The *Labour Representation Committee* was formed with J Ramsay MacDonald as Secretary. This was the beginning of the Labour Party

TRADE UNIONS AND THE LAW

Hardly had the new Labour Party been formed when the trade unions encountered a situation which impressed on their members the practical value of direct parliamentary representation. In 1900 there had been a strike on the *Taff Vale* Railway. The Company decided to sue the men's trade union for damages alleged to have been incurred during the strike The case was carried to the House of Lords. To the consternation of the trade union world, the Company won its case. The Amalgamated Society of Railway Servants was ordered to pay £23,000 damages. The trade unions had believed that the Acts of 1871–6 protected them against such a contingency. Moreover, it raised a serious issue for all. Strikes are obviously designed to hinder employers and inevitably cause them financial loss. If the funds of a trade union could be mulcted to meet such claims for damages, strike action would become impossible. The full implications of the decision stimulated tremendous trade union activity up and down the country. Membership rose rapidly, and a great agitation began for the restoration of the conditions they thought they had been granted in 1871-6. The newly-formed Labour Party was galvanized into action. At the general election of 1906 it put up 50 candidates of whom no less than 29 were at the head of the poll. Fourteen miners' candidates were elected under the auspices of the Liberal Party and later joined the Labour Party. There were also about a dozen "Lib -Labs." Working-class representation in the House of Commons became effective for the first time. The sequel was the passing of the Trade Dispute Acts of 1906 by a Liberal Government. It reversed the Taff Vale decision and gave trade unions immunity from liability for civil wrongs,

but a few years later the trade unions were once more at law. In July 1908 Osborne, a member of the Amalgamated Society of Railway Servants, took proceedings to restrain his union from spending any of its funds on political work Osborne won his case. Similar proceedings were taken against other unions and they were also restrained by legal injunction from using their funds for political purposes.

The Labour Party was in the main a trade union party and it was customary for some of the unions to make special levies to meet election expenses and salaries to members sponsored by them. The existence of the Labour Party therefore depended on the trade unions. Long before the twentieth century trade unions had used their funds for political objects, but it was not until the rise of the Labour Party seemed to threaten the assured position of the other parties that action was taken. The political power of the trade unions was thus at stake; and the Liberal Government was naturally disinclined to act with dispatch. The Act of 1911, which introduced payment of members of Parliament, gave the Labour Party a respite; but its position was not assured till Parliament sanctioned political levies by the unions in 1913. The Trade Union Act of that year gave them this right, subject to certain conditions, one being that the objects of a levy must be sustained by a majority vote of the membership, another being that the minority should have the right to "contract out."

The most recent Act affecting the powers of trade unions was passed in 1927, after the General Strike of the previous year Its ostensible object was to prevent a repetition of this experience; but it went a good deal beyond this. It declared a strike illegal if it had an object beyond the furtherance of a trade dispute in an industry in which the strikers were engaged; *and* if it was designed to coerce the Government directly or by inflicting hardship on the community. Definition was sufficiently vague to make almost any important strike illegal. Once a strike is declared illegal, the trade unions concerned lose the protection afforded to their funds by the Act of 1906. Other clauses had nothing to do with the General Strike, and are explicable only on the ground that the Government was determined to have its revenge on the trade union movement. Civil servants were forbidden to join trade unions with political affiliations, and trade unionists wishing to pay political levies were required to "contract in." The Act was essentially vindictive. Hence the enthusiasm with which the Labour Government repealed it in 1946.

THE LABOUR MOVEMENT AND POLITICS

In the momentous years between the death of Victoria and the start of the First World War, strong currents were propelling social and economic life in new directions The country was convulsed with strikes and lockouts. There was widespread unemployment The movement for the enfranchisement of women had abandoned the orthodox forms of persuasion A section of the Conservative Party, headed by Sir Edward Carson, had threatened to use armed force in support of the claims of Ulster in opposition to Irish Home Rule. Liberalism remained in office by adopting a programme of social reforms which were diametrically opposite to its traditional creed of

laissez-faire. It retained its hold on the working-class vote by factory legislation, old age pensions, national insurance, trades boards and other devices equally inconsistent with the benefits of competitive private enterprise, while it continued to pay lip service to rugged individualism.

Meanwhile the rapid industrialization of countries such as Germany, the United States and Japan was swiftly destroying Britain's superiority in world markets. Aided by tariffs and state subsidies, manufacturers and merchants of these countries were able to push trade with a vigour and success which alarmed Britain. When Joseph Chamberlain left the Cabinet to conduct his Tariff Reform and Imperial Preference campaign, Free Trade was on its deathbed. In the face of bitter international rivalry, manufacturers sought to reduce costs or at least to keep them down; and this inescapably put a check on the amount profits could forgo for wage increases. So far the working classes had gained one concession after another. There were many shameful blots on the industrial system; but the general standard of living had risen appreciably in the second half of the nineteenth century. In the years before the war it was clear that this phase was passing. Capitalism was no longer willing nor so able to make further concessions, though there was no slackening of technological progress. Every year saw a prodigious increase of man's productive capacity.

On the Continent and in the United States, the first decade of the twentieth century witnessed the growth of a social doctrine which repudiated political activity of the working class in favour of expropriation of the rentier by militant trade unions organized to include all members of any particular industry. According to this view, variously called Syndicalism and Industrial Unionism, the tide of lightning strikes, stay-in strikes, and sympathetic strikes, would reach high-water mark in a general strike of all unions. The general strike would demonstrate the powerlessness of a parasitic class of owners, who would be forced to hand over the management and ownership of industry to the unions concerned.

Influenced by a stay in America, where mass strikes and sabotage were widely regarded as a prelude to the downfall of capitalism or to an attempt to bring about its downfall, Tom Mann of Dock Strike fame gained the support of others with syndicalist sympathies in a campaign to simplify trade union organization. In 1909 there were no less than 1,168 British trade unions with a total membership of 2,369,000. From the syndicalist viewpoint less than two dozen would have been enough to cover the industries of the country; but the single railway industry had no less than five unions open only to railway personnel competing with nearly fifty others which accepted railway personnel for membership. In the building industry, with its multiplicity of crafts, the number of unions competing for members or pursuing self-sufficient policies was still greater.

The influence of these new ideas was apparent towards the end of 1910. In that year there were strikes or lockouts in almost every major industry. Some of the strikes were unofficial, and this showed the resentment of the rank and file against their leaders, as well as their discontent with industrial conditions. All of them are evidence of the deep-seated unrest that prevailed throughout the working class at this time. The miners' strike for a minimum

wage was sufficiently impressive to influence the Government to concede their demands The formation of the National Union of Railwaymen in 1912 was a syndicalist triumph It created one large union on industrial lines for the railways Some years before this the transport unions had formed the Transport Workers' Federation. In 1913 it joined with the Miners' Federation of Great Britain and the newly-formed National Union of Railwaymen, to create the *Triple Alliance*. The formation of this gigantic organization, designed to take joint action in industrial disputes, was received with enthusiasm by left-wing workers and with trepidation by the older school of trade union leader, when the coming of war checked the movement.

The wave of syndicalism which passed over the British trade union movement during those momentous years was at once a protest against the unwillingness or inability of industry to provide the mass of the people with the conditions of a good life, and an indictment of the conservatism of the older school of trade union leader and of a Labour Party which had allied itself to the Liberals Had circumstances permitted, however, it is extremely unlikely that its policy would ever have been carried to its logical conclusion. Before the end of the scene the curtain came down. When it was raised, a new act was in progress, with a caste so transformed as to be almost unrecognizable. At the outbreak of war there were protests in favour of international working-class solidarity; but the leaders of the labour movement soon threw themselves into war-prosecution with the enthusiasm of life-long chauvinists. Trade unions surrendered their practices and customs, including the right to strike.

The end of the war was welcomed with relief and enthusiasm by all classes of people, who looked forward with hope to reconstruction and the establishment of a better social order able to utilize the vast capacity for organization the years of crisis had revealed. For the most part such hopes were doomed to disappointment A boom in trade raised demands for increased wages, especially from the miners, whose industry was notoriously inefficient. The appointment of the Sankey Commission on the mining industry evoked widespread enthusiasm. Its recommendations were radical; but its fate was the ice box. Below the surface of national life there was now a growing body of discontent. Some lessons of war-time production had not been lost on the working class The tremendous potentialities of industry, the gigantic feats of organization achieved during the war, rightly convinced many people that there exist resources for a vastly higher standard of living. Health services and unemployment insurance had already been extended; but there was room for still more ample schemes of social betterment. While such notions were gaining ground the workers rallied to their trade unions. Membership, which had been 4,145,000 in 1914 and 6,500,000 at the beginning of 1919, rose to 8,334,000 by the close of 1920. Meantime the engineers, the builders and transport workers—to mention only the important ones—carried out great schemes of amalgamation.

The policy of the sympathetic strike, which had been at the root of the formation of the Triple Alliance of miners, railwaymen and transport workers in 1914, got new support. It was put to the test in 1921 and found wanting Railwaymen and transport workers hesitated and finally refused to come to

the assistance of the miners who were on strike. The idea of large-scale strike action, however, was not abandoned. It had already taken too firm a hold of the trade union movement to be lightly discarded. To the thoughtful observer it seemed that there could be no turning back. The solidarity of the working class was too securely established. A general strike seemed wellnigh inevitable, and it came in 1926. Friends and enemies were astonished at the loyalty of the rank and file. It was indeed an amazing demonstration, but less of revolutionary spirit than of quiet determination on the part of the workers to help their fellows, when compelled by *force majeure* to accept a wages cut. Old unions and new stuck by one another with a loyalty that aroused the admiration of countless people, though the strike itself was foredoomed to failure, if only because it raised problems of which the union leaders had no prevision The solidarity shown was not a confession of faith in the syndicalist creed. It was simply a demonstration of class loyalty.

Meantime the political wing of the working class movement had become the second party in the State. After the Khaki Election of 1918 the Labour Party consolidated its position steadily. Down to that year it had been a federal body representing trade unions, trades councils and socialist societies. There was no means by which individuals might be represented except through trade unions or the I.L.P. or the Fabian Society. This was changed in 1918, when the Labour Party revised its constitution so as to admit individuals who need not be members of a trade union or socialist organization. This considerably widened the appeal of the Labour Party at a time when Liberalism was on its last legs. In 1924 and in 1929 Labour, now the official opposition, was called on to form a government Successive attempts to carry out a half-hearted liberal policy disheartened many of its most loyal supporters of previous years

The working-class movement, whose history we have recalled in these pages, has three wings· the trade unions, the Labour Party, and the co-operative movement. The senior partner is the trade union movement and, in a sense, the Labour Party is its child The close connection that has always existed between the two is a source of financial strength and of moral weakness. For a party which gives a preponderating share of control to trade unions is liable to be at the mercy of sectional interests which limit its public appeal. The alignment of classes which seemed so clear-cut fifty years ago has been profoundly modified by the growth of the professional and salaried classes, and no political party can ever hope to achieve political power without their co-operation.

CHAPTER XIII

THE PLACE OF WOMEN IN SOCIETY

To say that the last two centuries have witnessed a spectacular growth of factory production is another way of saying that they have also witnessed the disappearance of the home as an economic unit. The break-up of the home as a unit of production is the clue to the origin of a new social movement and a new social myth. For the first time in history there was a widespread revolt of women against the social status imposed on their sex, and the social status of women became the focus of a fantasy still cherished by many males who might well know better For the doctrine that woman's place is the home is peculiarly the product of a period in which man had been lately displaced from the home as his workplace.

What is still true of peasant communities was broadly true of manufacture, when most manufacture was conducted within the framework of domestic production. A peasant community accepts a limited division of labour between the sexes as a matter of course. Before marriage the farm girl shares work in the fields with her brothers. Once a mother, it is more convenient to concentrate on such tasks as making the butter, feeding the chickens or cooking the household meals; but such division of labour as the exigencies of reproduction dictate does not necessarily entail a recognized difference of social status The head of the home is the stronger personality, not necessarily the male partner. Only when industrialization brought in its train a multiplicity of new vocations outside the home, did the rights of women become a dominant political issue, starting in social strata most affected by the change.

At its inception the feminist movement was essentially a middle-class movement Nor could it have been otherwise. Power machinery was no respecter of sex. It drove women and children into factories where the privilege of sharing the right to work with their menfolk was the privilege of bare subsistence. Only among those exempt from the choice between wage work and starvation did the social status of women emerge as a challenge to self-regard From its beginnings a prosperous bourgeoisie of merchants, entrepreneurs and their professional attendants had conferred on its womenfolk such privileges and restrictions as womenfolk of the rich had enjoyed from time immemorial. Where idle daughters are a guarantee of noble birth or success in the scramble for monetary advantage, women enjoy abundant cultural compensations for acquiescence in their social valuation as the weaker sex. Costly clothing and rich food, ample personal service and leisure for music, light reading or serious study in a society which could offer the other sex few gainful opportunities for intellectual or artistic work, are amenities not to be lightly esteemed, the more so in a milieu which identifies women's work with menial tasks The position of woman as the arbiter of the arts and the custodian of culture becomes uncertain only as the era of bourgeois dominance reaches its peak Technology is now imposing on society culture values which bear the indelible stamp of what have hitherto

been exclusively male activities; and vast numbers of women in humble walks of life are competing with men for work outside the home. We now witness the entirely novel spectacle of woman's refusal to accept economic and political dependence on the male head of the household as the price of personal comfort.

WOMEN IN MEDIEVAL TIMES

The extent of women's employment depends on the prevailing economic system, on the extent to which machinery is employed and on the social outlook of the time. In medieval days there was little capital. Windmills and water-wheels drove corn mills and fulling mills, but in nearly all other employments hand tools were the only aids to labour. The home was therefore the centre of most economic activities. Carding, spinning, weaving, baking, butter and cheese-making and ale-brewing were household tasks; and in all of them women played a predominant part (Fig. 56). The following quotation from *The Book of Good Husbandry* (*c.* 1500) shows how varied was their work:

"In the begynynge of Marche, or a lyttell afore, is tyme for a wyfe to make her garden, and to gette as many good sedes and herbes as she canne, and specially suche as be good for the potte, and to eate . . . let thy dystaffe be alwaye redye for a pastyme, that thou be not ydle. . . .

"It is convenyente for a housbande to have shepe of his owne, for many causes, and than maye his wife have part of the woll, to make her husbande and herselfe some clothes. And at the least waye, she may have the lockes of the shepe, eyther to make clothes or blankettes and coverlettes, or bothe. And if she have no woll of her owne, she maye take woll to spynne of clothe-makers, and by that meanes she maye have a convenyent lyvynge, and many tymes to do other warkes. It is a wyves occupation, to wynowe all maner of cornes, to make malte, to wasshe and wrynge, to make heye, shere corne, and in tyme of nede to helpe her husbande to fyll the mucke-wayne or dounge-carte, dryve the ploughe, to loode hey, corne, and suche other And to go or ride to the market, to sel butter, chese, mylke, egges, chekyns, capons, hennes, pygges, gese, and all maner of cornes. And also to bye all maner of necessarye thynges belongynge to houssholde, and to make a trewe rekenynge and a-compte to her housbande, what she hath payed." (Quoted M. Phillips and W. S. Tomkinson, *English Women in Life and Letters*, Oxford, 1926, 10.)

All women, however, were not simply unpaid housewives or Jacks-of-all-trades. At an early date, large numbers must have been "gainfully employed." The expansion of the market and the growth of capitalism offered profitable outlets for their labour. While still continuing to do some household work, they could make money by spinning or carding wool for the market. Down to the industrial revolution spinning was indeed the great occupation of women. In some places they also wove. At the end of the fourteenth century, one-fourth of the cloth woven in York was produced by women; and in an Act of 1363 it was stated,

"the intent of the King and of his council is that women, that is to say, brewers, bakers, carders and spinners, and workers as well of wool as of linen-cloth and

of silk, brawdesters and breakers of wool, and all other that do use and work all handiworks, may freely use and work as they have done before this time." (Quoted Lipson, *Economic History of England*, i, 317.)

There was often hostility when women encroached on men's work. Strongly entrenched in their guilds, men were able to enforce ordinances to check female competition which, they argued, was the cause of unemployment. At Bristol in 1461, it was complained that weavers employed their wives, daughters and maidens,

"by the which many and divers of the king's liege people, likely men to do the king service in his wars and in the defence of this his land, and sufficiently learned in the said craft, goeth vagrant and unoccupied, and may not have their labour to living" (Quoted Lipson i, 317.)

Sometimes a guild prohibited employment of women, though in general widows were permitted to follow their husband's craft, provided that they did not remarry. As late as 1726 the Bakers' Craft in Aberdeen was gravely perturbed by the competition of women who used their own ovens and sold the produce themselves. The minute reads,

"Tha baxter traid taking to their consideration the great loss sustained by this traid through several women within this town thus working in their own houses plum cake, seid cake, sugar biscuit, and other pastry, and bringing the same to the several bakehouses of the freemen of this traid to be by them fired, and which pastry they thereafter sell and vend through the town, for remeid whereof for the future, the said traid hereby statutes and ordains that no freeman of this traid in time coming shall give the use of his oven for firing the above pastrie so wrocht as aforesaid being for sale, and that under the penalty of ten merks Scots." (Quoted Bain, *Merchant and Craft Guilds*, 1887, 228.)

In some trades women's labour was permitted only under the most stringent regulations. Witness the case of Rachel Baxter of Aberdeen, admitted to the Tailors' Craft provided

"that she shall neither take to be prentiss nor employ in any work either within or without doors as servants but only women, . . . second, that she shall have only the privilege of mantua-making, and no ways make stays, or import the same to sell from any other place; and it is hereby declared that thir presents to be no precedent to any woman in tyme coming" (Quoted Bain, 257.)

The general opinion of women in early times was *en rapport* with the teaching of a celibate priesthood, and by the same token not flattering to their sex. They were said to be unsteadfast and fickle. "Excuses are neuer further off women than their apron strings," says one writer. The following questions, taken from the pocket-book of one Johannes Gysborn, a priest, shows with what distrust the Church viewed women:

"Questions for a Woman.

Haue ye maid youe more gayer in Reyment off Kercheus one your hed, for plesur of ye world?
Haue youe obeyd your husband at alle tymes, os ye are bownd?
Haue youe weschyd your face with any stylled waters ore oyntementes to make youe fayrer in the syght off pepull?
Haue youe had any envy agayns any womane, that sche has been fayrer than youe, or better loved than youe?
Haue youe bene mystemperyd with ale att any tyme?
Haue ye bakbyted or slaunderd any man or woman?
Haue youe maid any solemne vowe of fast ore pylgrimage?
Haue youe payd your tythes & offerynges onto the chirche?
Haue you done your pennans?"

(Quoted Phillips & Tomkinson, 25.)

Chaucer's Wife of Bath was not so sure that the boot was not on the other foot. Indignantly she cried:

"By god, if wommen hadde writen stories,
As clerkes han with-inne hir oratories,
They wolde han writen of men more wikkednesse
Than all the marke (race) of Adam may redresse."

In Scotland, the Laws of the Four Burghs (thirteenth century) laid down that a burgess whose wife went to law without consent of her husband, should not be liable for fine or expense. The course prescribed for him by law was that "he shall chastise her as a bairn under age."

THE REFORMATION AND WOMEN

The revolution in social life, in economic organization, in literature and in modes of thought which signalizes the transition from medieval to modern times had deep and lasting effects on the position of women in society. Enriched by expansion of trade and ever-increasing contacts with foreign lands, the middle and upper classes enjoyed a rising standard of living, with better houses, elaborate and costly clothes and more varied food. In the vigorous and stimulating atmosphere of the time there were greater opportunities for reading, for study, for music and general intellectual pursuits. On the whole, life for middle- and upper-class people thus took on a softer hue. There was increasing humanity and gentility in the more spacious and comfortable homes of Tudor days.

The Reformation had a double effect on the position of women. By exalting personality and declaring that what matters most is the individual soul, the Protestant Church placed both sexes by implication on an equal footing. For women, like men, have souls to save. By proclaiming, as Luther did, that marriage and the family are the foundations of society, Protestant doctrine also emphasized the dignity and social importance of women. Their prestige was likewise strengthened by Luther's declaration that the clergy have a right to marry; and in 1525 he boldly asserted his right by marrying an escaped nun. This view was accepted slowly in England. Elizabeth made no secret of her intense dislike of it.

On the other hand, the Reformation was not all gain for women. Its leaders showed no inclination to improve women's social position. John Knox described women as "weak, frail, impatient, feeble, inconstant, variable and cruel." The influence of the Puritan and Calvinist factions was more actively hostile. A revival of asceticism and distrust of the body, a feature common to the teaching of Calvin and Knox, put women in an undesirable light, and though the extremer teachings of Calvinist and Puritan were ephemeral, their views coloured the general attitude to the rightful status of women till our own century. Another disservice to the cause of women wrought by the Reformation was the abolition of the monastic orders Their passing eliminated the only learned profession open to women. Nuns had been permitted to teach. So a freedom permitted to women in Catholic communities was denied to them in Protestant countries. It is true that upper class women had opportunities of doing administrative work on their husband's estates, but marriage became the only career open to the middle class woman.

THE RISE OF CAPITALISM AND WOMEN'S EMPLOYMENT

The social and economic life of the mass of women was untouched by the currents which agitated European society so violently in the sixteenth century. More significant for their status than anything else was the spread of capitalism, which subdivided employments, created new industries and brought women's work more and more under the direction of the merchant capitalist. Long before the industrial revolution drove work from the home to the factory, women's employment had become extensive. Some work, such as sewing, baking and brewing, was part of the housewife's ordinary duties for which she received no monetary reward, but a great deal of her labour was reckoned as part of the family employment and payment for it was included in the wage received by the head of the family. This was specially true of agriculture. On large farms women performed important and responsible duties like milking, cheese-making, butter-making, the care of poultry. The work was exacting and the hours of labour intolerably long. Spare time was usually given to spinning.

The farmer's wife who directed the labour of her daughters, as well as that of the wives and daughters of the labourers, required business ability of no mean order. In some parts of the country, such as the West Riding or the Manchester area or the West country, the cottage was often a veritable factory on a small scale with the women and children engaged in picking, sorting, carding and spinning wool or cotton, and the husband and grown-up sons labouring at the hand loom. Where the capitalist system was well established, as in Lancashire or the West Country, there was considerable division of labour, each woman's activity confined to a particular task for a piece work wage.

Wives and daughters of labourers found ready employment in domestic service and in farm work itself. These "women servants in husbandry" were often pauper girls apprenticed to farms by Poor Law authorities. A Devonshire woman who had been such an apprentice, reported in 1843 to a Government Commission,

"I used to be employed when I was apprenticed in driving bullocks to field and fetching them in again, cleaning out their houses, and bedding them up; washing potatoes and boiling them for pigs, milking, in the field leading horses or bullocks to plough; maidens would not like that work now. Then I was employed in mixing lime to spread, digging potatoes, digging and pulling turnips, and anything that came to hand like a boy. I reaped a little, not much; loaded pack-horses, went out with horses for furze. I got up at five or six, except on market mornings, twice a week, and then at three I went to bed at half-past nine. I worked more in the fields than in the house" (Quoted Ivy Pinchbeck, *Women Workers and the Industrial Revolution*, 1930, 17.)

There were many smaller industries, such as lace-making, needle work of all kinds, button-making, hat-making, to name only a few, where women's labour predominated. Yet these do not exhaust the list of women's employments For instance, mining and the metal industries accounted for large numbers For centuries women had been employed in and about mines. When mines were shallow and labour requirements large, miners' wives and daughters carried coal up ladders from the face where the menfolk were engaged. Expansion of mining and use of power to haul coal to the surface locally resulted in abolition of women's labour, but elsewhere it persisted to Victorian times. When the Coal Commission made their inquiry in the 1840's women were commonly employed in coal mines in Scotland and in certain parts of England. They worked under the most brutalizing conditions. A writer, describing his visit to the Whitehaven mines in 1813, tells us that he saw a horse drawing a long line of baskets,

"driven by a young girl, covered with filth, debased and profligate, and uttering some low obscenity as she passed us. We were frequently interrupted in our march by the horses proceeding in this manner with their cargoes to the shaft, and always driven by girls, all of the same description, ragged and beastly in their appearance, and with a shameless indecency in their behaviour, which, awe-struck as one was by the gloom and loneliness around one, had something quite frightful in it, and gave the place the character of a hell. All the people whom we met with, were distinguished by an extraordinary wretchedness, immoderate labour and a noxious atmosphere had marked their countenances with the signs of disease and decay." (Quoted Pinchbeck, 243.)

Miss Pinchbeck points out that this pit was not a small, uneconomic concern It was a large undertaking employing 600 people and more than 100 horses. So disgusting were the revelations made by the Government Commission, that Parliament immediately passed the first Mines Act (1842), prohibiting the employment of women under ground. Female labour was also found at ironstone, copper and lead mines. Even at the furnaces and forges they could be seen sorting ore or working the blast. In and around Birmingham the making of buttons, buckles, bolts, pins, nails and innumerable other metal articles was mainly carried on by women and children. In their homes or little workshops they worked up materials supplied by merchants to whom they returned the finished goods. Sometimes married women continued to labour at their old occupations.

Women were also found in countless other crafts and businesses, in jewellery, in millinery, in hairdressing, in fan-making, in retail trade. Since

the business unit was usually small, women frequently helped their husbands. Often on the death of her husband, the woman carried on the business with the aid of skilled men. Thus the following advertisement appears in the *Newcastle Courant* of February 13, 1779:

"M. Hawthorn, Widow of the late John Hawthorn, Watchmaker of this town, tenders her grateful thanks to the friends of her late husband, and begs to acquaint them and the public, that she will carry on the said Business (having engaged able workmen therein), she hopes for the continuance of their favours, which she will at all time studiously endeavour to merit

"Jewellery, Trinkets, Watches, Music and Musical Instruments" (Quoted Pinchbeck, 285)

THE LEISURED LADY

The growth of capitalism vastly increased opportunities for women's employment, and brought larger and larger numbers of them under the influence of the market and of the merchant employer, now the key man of the new social order. It had another effect of a different sort. It created a more comfortable way of living for the middle and upper classes. More spacious houses, greater variety and delicacy of food and clothes, the institution of tea and coffee drinking, conspired together to encourage ostentatious social intercourse, snobbery and "emulation."

A cardinal tenet of Puritanism, when Puritanism was the creed of the middle class, was the identification of success in business with personal righteousness. Such a belief encouraged ostentation. The successful business man delighted to demonstrate his success to the world by showing off his wife and daughters expensively clad, living a life of ease and elegance This taste was in evidence before 1700, and it was widely held in the eighteenth century Women gladly handed over their infants to wet nurses and their children to boarding schools that they themselves might enjoy their leisure to the full. Their esteem in society was proportional to the leisure they enjoyed. There were now stately houses in London. There were visits to Bath, to Tunbridge Wells or other fashionable resort where ladies went to take the waters, to drink coffee, to play cards and to talk scandal

The author of *The Town Ladies' Catechism* satirises the social ideal of Queen Anne's day:

"How do you employ your time now?" asks the questioner.

The Lady replies "I lie in bed till noon, dress all the afternoon, dine in the evening and play at cards till midnight."

"How do you spend the Sabbath?"

"In chit chat"

"What do you talk of?"

"New fashions and new plays"

"Pray, Madam, what books do you read?"

"I read lewd plays and winning romances"

"Who is it you love?"

"Myself"

"What! nobody else?"

"My page, my monkey and my lap dog."

While working-class women toiled in the fields or in the dairy or worked their fingers to the bone in workshop or mine, middle- and upper-class women lived in idleness and luxury. The view that women and children should work to maintain themselves was assiduously preached to the "lower orders." Pauper children were packed into workhouses or boarded out as apprentices to labour night and morning Defoe waxed eloquent on the nimbleness of children's fingers He writes of Halifax: "hardly anything above four years old but its hands sufficient to support itself." Middle- and upper-class women were now the drones of society. The new fashion was to despise work, to glorify idleness as the highest form of gentility, and to exalt personal ostentation. The culture of the eighteenth century was a pecuniary culture.

THE INDUSTRIAL REVOLUTION AND WOMEN

The agrarian and industrial revolutions of the time profoundly affected the scope of women's employment. For some the changes meant more leisure, more independence and more freedom, for others privation, toil in the factories or sweated conditions in the old domestic trades. The wife of the large farmer now employed more servants, and was thus able to confine her activity to direction and management rather than to actual labour in the dairy or the fields As she ceased to work in the old way, she felt that she was nearer to the stature of a "lady." Her gentility was associated with her leisure. Accordingly, she tended to adopt the outlook of her social superiors. The situation of the wife of the small farmer or cottager was far otherwise She found herself in straitened circumstances. Her husband, perhaps unable to make good a legal claim to his holding or perhaps the recipient of a worthless allotment, had now to become a farm labourer; and the loss of common rights deprived his wife of an important source of income. With the loss of her independence, she had to take odd jobs about the farm, as a domestic servant or as an extra hand at harvest time and other busy season, and if her own lot was hard that of the widow or single woman was worse. The enclosure of the common lands destroyed all hope of independence for such. There was only the parish, except for those who were willing to move to an industrial area where they could take work in a factory.

The position of country women was aggravated by introduction of machinery, which destroyed some of their minor employments and led to overcrowding in others The gravity of the situation varied from district to district, and it affected married and single women unequally. The first major industry to come under the domination of power-production was cotton spinning. There was a time lag between the first impact of the new technique on the cottage and the employment of women in cotton mills. Meantime there was unemployment and family incomes were sorely depleted. Those who suffered most were women too old for factory work. They had nothing to take the place of the spinning wheel. In the woollen industry, the immediate effects of the introduction of machinery were not so catastrophic, but they were none the less severe. There was hardly a cottage or farm house that did not suffer reduction of its income as power machinery dis-

placed spinning wheels. Those unable or unwilling to enter the factories crowded into the remaining domestic employment, depressing wages and increasing the agony of the sweated home worker.

The appalling conditions prevailing amongst lace-makers, glovers, dress-makers, milliners and numerous other domestic employments was revealed by the Commission on the Employment of Women and Children in 1843. "In some of what are considered the best regulated establishments during the fashionable season, occupying about four months of the year, the regular hours of work are fifteen," they report "In many establishments the hours of work during the season are unlimited . . . very frequently they work all night." The workers naturally suffered grievous physical deterioration. Tuberculosis and malnutrition with its dire consequences were widespread. "These conditions," the Commission continues, "are worse than in the worst conducted factories. . . . There is no ventilation by day or night, and the work-girls are crowded one upon another in dark rooms" (Fig 57).

However, there is another side to the spread of industrialism. The factory, as a place for employment, had real advantages over the home Unlike the small cramped quarters of most cottages which had little enough room for ordinary household tasks let alone domestic employment, it was designed for work. It is true that the factories were wretched places, ill-ventilated and ill-planned, that hours were long and that employment was directed by harsh and often brutal overseers; but when the worst evils of the system had been remedied, the factory proved incomparably better suited for wage-earning employment than the home as it then was. By removal of handicrafts from the home, family conditions were often, and sometimes vastly, improved.

"Now that the home was no longer a workshop," says Miss Pinchbeck, "many women were able, for the first time in the history of the industrial classes, to devote their energies to the business of home making and the care of their children, who stood to benefit greatly by the changed home conditions."

In the second place, the factory operatives, even though hard worked and underpaid, had opportunities of sharpening their wits, of discussing matters of common interest and of leading a varied and sometimes interesting life denied to domestic workers who lived in isolation in their wretched homes. By taking employment in a factory, women—and most were young women—gained some degree of independence. They now received a wage direct. Formerly their earnings had been part of the family wage. Small as the wage of a factory employee was, it was usually higher than that obtainable in domestic employment or farm work. So women were now able to live better and dress better. Some people, like Gaskell (*Manufacturing Population of England*, 1836), regretted this as "another evil of the factory system"; but the more discerning realized the gain of personal and economic independence for the young unmarried woman. In 1840 a Government commissioner recorded:

"One of the greatest advantages resulting from the progress of manufacturing industry, and from severe manual labour being superseded by machinery, is

its tendency to raise the condition of women. Education only is wanting to place the women of Lancashire higher in the social scale than in any other part of the world. The great drawback to female happiness among the middle and working class, is, their complete dependence and almost helplessness in securing the means of subsistence. The want of other employment than the needle cheapens their labour, in ordinary cases, until it is almost valueless" (Quoted Pinchbeck, 313.)

Some Victorians deplored the employment of women. They asserted that it destroyed the home and displaced men. Where the factory operatives were married women, the home did suffer; and if there were young children the effects were doubtless disastrous; but most female hands were between the ages of sixteen and twenty-one The paid work on which they were now engaged was work which, under different conditions, had for long been done in the home itself. The variety of occupations followed by women in England is shown in the Census Return of 1841 Some were in factory industries such as cotton manufacture, others in domestic industries such as dressmaking. The largest group was domestic service with 712,493 people employed. Next came cotton manufacture with 115,425, dressmaking and millinery with 89,079, laundry work with 45,019, agriculture with 50,654, and teaching with 29,253.

While the industrial revolution transformed the scope of employment for working women, it presented middle and upper class women with greater leisure and a higher standard of living. Cheap labour provided them with an abundant supply of domestic servants They were more free from household drudgery, and many traditional household tasks were now transferred to industrial establishments. The freedom thus gained increased leisure. For there was a social taboo against the gainful employment of the middle class woman. A real lady kept her hands unsoiled; and if she wished to fill in her time with serious pursuits, there was always philanthropic work. Marriage was her vocation; and every young girl of the more prosperous classes was drilled in the arts of husband-hunting. For this her attractions were enhanced by learning the piano or painting or some sort of fancy work with no utilitarian object. When led to the altar she willingly gave up her freedom to think, to act or to own property. The husband was the unquestioned head of the family. Ignorant of worldly affairs, without sex instruction, with no interests beyond the care of her children, the Victorian mother was the slave of her husband

When child-bearing had reduced her physical strength and sheer ennui had destroyed her mental capacity, she took refuge in petty invalidism, attracting a sympathetic attention compatible with her unrelinquished gentility. Through prosperity or adversity, happiness or misery, she remained a model of propriety. Her home, her property and even her children belonged completely to the husband who could do as he wished with them. The only hope of employment for the widow without means was in the wretchedly over-crowded and sweated dressmaking and millinery trades. There she could ply needle and thread without loss of gentility. For those who failed in the marriage market the same dreary prospect was open. Alternatively,

they might become governesses, a trade which called for no special qualifications The mere fact that it was esteemed as such compensated sufficiently for the miserably low monetary recompense it offered (Fig 58).

THE CHALLENGE

To a world in which middle- and upper-class women were drones, excluded like their working-class sisters from the vote, scarcely less educated than they and, if married, with no legal rights of personal property, came the challenge of the French Revolution, and with it of Mary Wollstonecraft's *The Rights of Women* (1792) A few voices had already been raised on behalf of women. As early as 1694, Mary Astell had criticized the accepted view of women's place in society, had deplored the shallow education of her sex, and proposed a college for the higher education of women. Her lead was followed by "the blue stockings" of the next century, when Fanny Burney established the right of women to write as well as to read. Such women were not revolutionaries; but Mary Wollstonecraft sounded a note of revolt.

From over the Channel the doctrine of Liberty, Equality and Fraternity swept away cherished social beliefs like a gale, proclaiming new hope for the downtrodden. "Bliss was it in that dawn to be alive, but to be young was very heaven " So wrote Wordsworth Shelley, Godwin, Thomas Paine, and many others were carried away with enthusiasm; and though enthusiasm turned to disappointment, and sympathy to hatred, after the first flush of excitement, the doctrines of the French Revolution left an indelible mark on social thought They reinforced the humanitarian movement which had been growing in breadth and influence in the course of the century They conferred dignity on the individual and a higher value on human life Inescapably, therefore, current views concerning the position of women were influenced by the general upsurging of enlightenment and humanity. In this atmosphere Mary Wollstonecraft published her *Vindication of the Rights of Women* It appeared in 1792, having little influence at the time In the ensuing century it became the bible of the women's movement. In her own words her theme was.

"It is time to effect a revolution in female manners, time to restore to them their lost dignity—and to make them, as part of the human species, labour by reforming themselves to reform the world."

Mary Wollstonecraft vigorously condemned the emphasis then placed on the sexual function of women, as degrading to her sex and encouraging a low standard of sexual morals She claimed on their behalf unrealized capacities which should be drawn forth by education; and argued that women's independence and dignity would increase if they were permitted to earn a living, as did working women. Thus her message was for the woman of the middle and upper class, those reared to despise work, regarded by men as fragile, virtuous creatures, incapable of withstanding the buffets of every-day life, and endowed with the function of pleasing their menfolk by dress, manners and sexual compliance Mary Wollstonecraft poured scorn on this conception of womanhood. "How many women thus!" she cries,

"waste life away, the prey of discontent, who might have practised as physicians, regulated a farm, managed a shop, and stood erect, supported by their own industry, instead of hanging their heads surcharged with the dew of sensibility. . . . How much more respectable is the woman who earns her own bread by fulfilling any duty than the most accomplished beauty"

When the book appeared reaction against the French Revolution was in full swing. More anxious to conserve life as it was and to protect it from the subversive doctrines of France, women of the prosperous class to which she addressed her appeal either ignored it altogether or condemned it outright; but few decades were to go by before women of the wealthy classes became militant in the demand for legal rights of property.

WOMEN, MARRIAGE AND PROPERTY

When Victoria came to the throne a married woman could own no property. All that she possessed at marriage and all that came to her thereafter became part of her husband's estate. Her earnings as well as her person belonged to her husband. Home and children could be disposed of as he wished. However tyrannical the husband might be, however intolerable the union, there was no escape for the woman herself. Until 1857 divorce could be obtained only by special Act of Parliament. By the Marriage and Divorce Act of that year any man might divorce his wife for adultery, but a woman could not obtain divorce unless she could also furnish evidence of cruelty or desertion

Such complete dependence of the woman on her father or husband was based on a centuries-old tradition, enforced by theological sanction, and it commended itself to the new middle class of industrialists for reasons sufficiently discussed. At a time when profits were easy to earn and acquired wealth was the measure of respectability, the middle-class husband basked in his dignity as protector and provider of his household. It was a guarantee of his own respectability that his women folk could stay at home without the need to engage in gainful occupations As compared with the previous century there was, in fact, a deterioration of the status of middle class womanhood during the Victorian era. It was natural that individual women of spirit and character should revolt against these restrictions; but the revolt was usually personal. Florence Nightingale was one of them. Born in 1820 and brought up in a typically prosperous middle-class family, she refused to conform to the prescribed routine of company and visits, and to the small talk of the drawing-room. "What in the world and what have I done this last fortnight," she wrote in her diary in 1846:

"I have read the *Daughter at Home* to father, and two chapters of *Mackintosh*, a volume of *Sybil* to Mama. Learnt seven tunes by heart, written various letters Ridden with Papa Paid eight visits Done Company. And that is all. . . . O weary days, O evenings that seem never to end! For how many years I have watched that drawing-room clock and thought it would never reach ten! And for twenty or thirty years more to do thus!" (Quoted Ray Strachey, *The Cause*, 1928, 22.)

Her reaction, like that of many of her sex at this time, did not extend far beyond the range of her own inclinations. Florence Nightingale was no propagandist. She was, as she herself tells us, "brutally indifferent to the rights and wrongs of my sex." What she wanted above all else was to do something useful; and in spite of her indifference to the cause of women in general, she advanced it notably. In taking up nursing, then at such a low ebb, staffed as it was by unskilled and often drunken and disreputable women, she challenged the Victorian conception of woman's place in a male world and laid the foundations of a real profession of nursing (Fig. 59).

The first notable victory for women's rights was the Married Women's Property Act of 1870 In the eyes of the law, as we have seen, a married woman could not hitherto own property She could not claim the right to spend an income even if she earned it herself. If a married woman did in fact work to support a husband and a family, her earnings legally belonged to her spouse. Such a position was intolerable and was bitterly resented by many progressive people For many years there was agitation to remedy this state of affairs. Barbara Leigh Smith and John Stuart Mill played a leading role. Mill practised what he preached. When he married Harriet Taylor in 1851, he drew up and signed a statement formally repudiating all rights over his wife's life and property. "The whole character of the marriage relation," he wrote,

> "as constituted by law being such as both she and I entirely and conscientiously disapprove, for this among other reasons, that it confers upon one of the parties to the contract, legal power and control over the person, property, and freedom of action of the other party, independent of her own wishes and will; I, having no means of legally divesting myself of these odious powers . . feel it my duty to put on record a formal protest against the existing law of marriage, in so far as conferring such powers; and a solemn promise never in any case or under any circumstances to use them"

Barbara Leigh Smith was a woman of wealth. Her *Brief Summary in Plain Language of the Most Important Laws Concerning Women* had a wide sale and secured many recruits for the movement. In 1857 a Bill was introduced into the House of Commons. Opposition was bitter. The Bill, it was argued, would destroy the home and "turn women into loathsome, self-assertive creatures no one could live with." At the same time another measure, the *Marriage and Divorce Bill*, was brought in. When it passed to the Statute Book, it conferred on divorced women the right to resume possession of their property. It thus removed a minor anomaly which could be cited as an argument for more drastic reform "If injured women were protected, what did uninjured wives want with their property? It was a useless and unnecessary fuss over nothing." So it was argued and so nothing was done. But the movement never died down.

Not until 1870 did a comprehensive bill again come up for consideration. When it reached the Lords it was so severely amended that it was the mere shadow of the original measure on its return to the Commons Even so, the truncated Bill which became law was regarded as somewhat of a triumph The Act stated that a woman might keep possession of what she earned,

but all real property and any personal property in excess of £200 was to belong to her husband. It was the thin end of a wedge The Act of 1870 was amended in 1882, when women gained full ownership of all property belonging to them at marriage or coming to them thereafter The abolition of a husband's rights over his wife's property is a milestone in the legal relations of the sexes; but there are still unresolved anomalies. To-day it is the husband who is most in need of legal protection. For he is still under legal obligation to support his wife, provide her with a home, pay her debts and income tax If she is fined for negligent driving or if she libels a neighbour, he must foot the bill. Only in one respect is the law still loaded in favour of the male and it concerns only a negligible minority. With respect to the disposition of landed property, the heir is the eldest son even though he has older sisters; but the *Administration of Estates Act* of 1925 declared that the rights of husband and wife are equal with respect to an intestate's other property

Another long fight which did not end till our own generation in victory for women was over the custody of children. Agitation began a little more than a hundred years ago when Caroline Norton, a London society hostess, discovered that she had absolutely no right at law over her children. Separated from her husband, she was penniless. To make matters worse, she found she had no legal status as a mother In fact, she had not even the right to see her children. She reveals that on one occasion she succeeded in meeting them by stealth as they walked in St. James's Park. Coming to hear of this, her husband packed the children off to Scotland, and refused to divulge their whereabouts to the unhappy mother. Thus shocked and disgusted by other revelations of legal injustice suffered by women, she determined to set out to agitate for redress, and in 1837 published a pamphlet entitled, *The Natural Claim of a Mother to the Custody of Her Child as Affected by the Common Law Right of the Father. Illustrated by Cases of Peculiar Hardship.* This brochure aroused widespread interest. It attracted the attention of one Talfourd, a young lawyer and M.P., whose own experiences of the law had prompted him to attempt the presentation of an *Infants Custody Bill* to the House of Commons. In association with Mrs. Norton, Talfourd prepared the Bill which he himself introduced into the House After much amendment it passed the Lords and reached the Statute Book—"a timid and hesitating measure, judged by modern standards, but nevertheless an immense and startling innovation," says Ray Strachey. The Act allowed mothers against whom adultery was not proved to have custody of their children under seven with right of access to older ones at stated times From such small beginnings the law has gradually changed in favour of women until they secured the same rights as men by the *Infants' Custody Act* of 1925.

WOMEN AND POLITICAL RIGHTS

The fight for political rights is a most spectacular phase of the history of the women's movement. The initial impulse came less from middle-class than from working-class women. When William Cobbett set out to capture

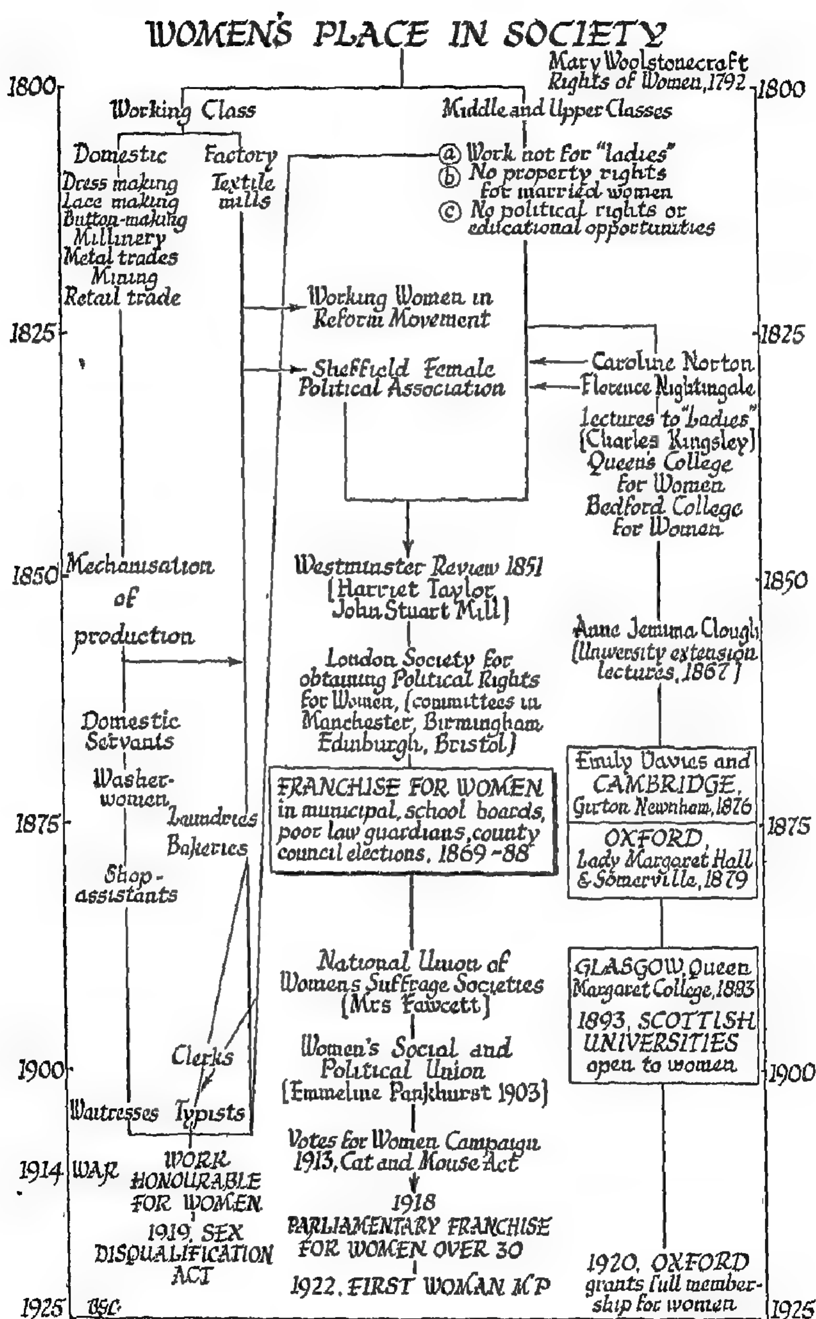
the support of working people, at the close of the Napoleonic War, women were conspicuous in radical reunions, especially in the factory towns. At Blackburn there was already a Female Reform Society amongst cotton spinners in 1817. The masculine leaders of the reform movement did not explicitly advocate female suffrage, for which there was as yet no wide popular demand; but the movement itself became the focus for a new participation of women in political discussion and organization

Carefully guarded from the bustle of everyday life and living in an atmosphere regulated by stern social conventions, Victorian women of the middle class were slow to take an active interest in politics It was in accordance with popular opinion that government was a man's business. When four women delegates arrived from America at the Anti-Slavery Convention held in London in 1846, the Convention was shocked. Their presence was declared to be "subversive of the principle and tradition of the country and contrary to the word of God." Such a view was not *en rapport* with the pioneer tradition of their own continent In 1848 a Women's Rights Convention was held at Seneca Falls in the State of New York and was the first of a succession in other states. They issued a Woman's Declaration of Independence setting forth the principles of liberty and equality, and they presented a Bill of Indictment against men who had monopolized employment, excluded women from higher education, and deprived them of the rights of property and freedom on marriage. American women corporately claimed political, economic and intellectual equality with men

At home the issue was raised in the *Westminster Review* in 1851, when Harriet Taylor, wife of John Stuart Mill, wrote an article advocating woman suffrage. About the same time, the Sheffield Female Political Association, which had come into prominence during the Chartist Movement, passed a resolution in the same sense. On the death of his wife, Mill threw his weight on the side of the reformers. Meantime a group of middle-class women, regarding the struggle for social reform without the vote as a hopeless one, had begun to agitate for political enfranchisement When Mill stood as Parliamentary candidate for Westminster in 1865, he made women's suffrage the main plank in his programme. He was supported wholeheartedly by women who drove through London displaying placards in his favour. When the Reform Bill was under consideration in May 1867 Mill, now an M.P., moved for the inclusion of women in the franchise. Seventy-three members supported him. From this point the woman's vote became a live political issue. Three years later a Suffrage Bill drawn up by Dr. Pankhurst was quashed in committee by Gladstone.

Meantime the London Society for obtaining Political Rights for Women was busy forming committees in Manchester, Edinburgh, Birmingham and Bristol. Though the final goal was not reached for another fifty years, there were minor victories at the start In 1869 women obtained the municipal franchise. In the following year Forster's *Education Act* gave them the right to vote and to sit on School Boards. In 1875 an Act enabling women to be Poor Law Guardians was passed, and in 1888 they were included with men in the electorate of the newly-established county councils. A year later two women were elected to the London County Council, but the Act which

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TIME CHART 15 THE WOMEN'S EMANCIPATION MOVEMENT

had sanctioned the voting of women ratepayers had said nothing about their eligibility for election. The case went to court After endless delays and appeals, the case went against them. Thereafter Bills were introduced to regularize the position, but it was not until 1907 that the *Qualification of Women Act* made them eligible for county and borough councils and for the offices of chairman and mayor Parliamentary franchise was still denied women. The Reform Act of 1884 which had extended the franchise to the rural working class excluded women on the ground that they "would overweight the ship." Such was Gladstone's verdict. He "feared voting would trespass upon their delicacy, their purity, their refinement, the elevation of their whole nature." Australia and New Zealand thought otherwise In the next decade they adopted universal suffrage.

Thus progress was steady, if slow The political movement at home gathered strength. By the Reform Acts of 1867 and 1884 working-class men had been enfranchised; and this stimulated their womenfolk to greater endeavours. At the turn of the century the manufacturing population was showing keen interest in the movement In 1903 the Women's Social and Political Union was founded in Manchester by Mrs. Emmeline Pankhurst, mother of Christabel and widow of Dr. Pankhurst who had helped to found the Independent Labour Party in Manchester. Keir Hardie, founder of the national Independent Labour Party, assisted them at every turn and gave them his ungrudging support. Under the leadership of Mrs. Pankhurst, Christabel and Sylvia Pankhurst, together with Mr. and Mrs Pethick-Lawrence, the W.S.P.U went from strength to strength. Disappointed and bitter at Parliament's long delay in conceding their reasonable demands, the W.S P.U. turned to direct action. The suffragettes, as they were called, in contradistinction to the more moderate suffragists who were led by Mrs. Fawcett in the National Union of Women's Suffrage Societies, threw discretion to the winds, believing that this was the only way to attract public attention and force the issue in their favour Political meetings were interrupted with cries of Votes for Women, technical offences were committed to secure imprisonment and martyrdom, letter boxes, and even houses, were set on fire Downing Street was invaded by women who chained themselves to the railings, policemen were assaulted, pictures in public galleries were slashed and in countless other ways the suffragettes attracted attention to their claims. (See *The Suffragette Movement*, by E. Sylvia Pankhurst, 1931.)

From 1906 to the first general election of 1910 the fury of the suffragettes increased, being directed against the Liberal Party which had so frequently broken its word A new phase began in June 1909. An imprisoned suffragette went on hunger strike and was released. An act so spectacular was bound to be copied. The Government retaliated with forcible feeding. The militants resorted to destruction of property, and when a truce was called in 1910 the movement had assumed a menacing aspect. After the general election efforts were made to secure a measure agreeable to all sections of the movement, but this proved to be impossible. The Bill presented was a very conservative measure which did not get beyond its second reading. A fresh outburst of militancy followed. In 1911 it appeared that the Liberals were

at last about to do something A Reform Bill was introduced in the following year Though drafted for men only it was assumed that women could be included by amendment at committee stage When the House went into committee in January 1913, the Speaker ruled the feminist amendment out of order.

Interminable delays exasperated the suffragettes. Encouraged by Christabel Pankhurst, a more violent form of militancy gained ground. Disgusted with the new tactics, a moderate faction, including Mr. and Mrs. Pethick-Lawrence, withdrew from the Union. Christabel went to Paris from whence she conducted the campaign. Suffragettes were thrown into prison, forcibly fed and released In 1913 the Government passed the *Cat and Mouse Act* which gave the Home Secretary power to release a hunger striker, who might otherwise die in prison, and then rearrest her at will Meantime the extreme measures of the suffragettes were causing more and more disaffection in the ranks of the movement The more sober elements joined the constitutional suffrage societies which had been united in the National Union of Women's Suffrage Societies.

Then came the war in 1914 and a truce to all domestic disputes. Middle-class women, from whom the chief suffrage leaders were drawn, seized their opportunity to throw off restraints of a respectability which they could now relinquish with patriotic relish. They invaded office, factory and farm to help in the national effort, many of them surprised to find that they were capable of work. What had previously been beneath their dignity was now an exalted duty, and having shown themselves to be capable of service to the State they could no longer be excluded from a share in its government. Only a reactionary minority still protested when the *Representation of the People Act* of 1918 enfranchised all women over thirty years. Complete equality with men did not come for another ten years. Meantime women could be elected to the House of Commons under the *Parliament (Qualification of Powers) Act* In 1919 the first woman took her seat in the House of Commons.* She was Viscountess Astor, conservative member for the Sutton Division of Plymouth. In the same year the *Sex Disqualification (Removal) Act* declared that no woman should be disqualified by sex or marriage from the exercise of any public function

WOMEN AND EDUCATION

Though Mary Astell had proposed the establishment of a woman's college as early as 1694, almost 150 years elapsed before anything really effective was done about the higher education of women. The social atmosphere of English middle- and upper-class life in the eighteenth century did not encourage education. An age which was content with fine clothes, polished manners, card-playing and idling was not likely to attach much importance to the training of the mind "We are taught to place all our art in adorning our outward forms," said Lady Mary Wortley Montagu at the beginning of the eighteenth century,

* Countess Markievicz was elected in 1918, but had vowed not to take her seat. In any case she was behind prison bars

"and permitted without reproach to carry that custom even to extravagance while our minds are entirely neglected, and by disuse of reflections, filled with nothing but the trifling objects our eyes are daily entertained with."

Since marriage was regarded as the only desirable vocation for women, anything unconnected with it was regarded as unnecessary and unladylike. Had training for marriage been really effective there would have been some unilateral plausibility for the prevailing view, the only training available for women was training for husband-hunting As one headmistress expressed it, girls were not "trained to be wives; only to get husbands." Writing in 1810, Sydney Smith declared.

"The system of female education, as it now stands, aims only at embellishing a few years of life, which are in themselves so full of grace and happiness, that they hardly want it, and then leaves the rest of existence a miserable prey to idle insignificance . . the error is . to insist upon it that every woman is to sing, and draw, and dance, with nature or against nature, to bend her apprenticeship to some accomplishment, and if she cannot succeed in oils or water colours, to prefer gilding, varnishing, burnishing, box-making, to real and solid improvement in taste, knowledge, and understanding "

The immediate result of the industrial revolution was to check educational progress Working people crowded into industrial towns to spend their waking hours in mill or factory, while middle-class women devoted themselves to acquiring the social accomplishments expected of them In the long run the deep social and economic changes brought about by mechanization had a reverse effect. They created a demand for an education open to all The movement for the reform of women's education received a stimulus from Charles Kingsley, the author, and Maurice, a Cambridge professor, both leaders of the Christian Socialist movement. Kingsley and Maurice were sincerely shocked by the sweated conditions of employment among many classes of domestic workers, and started co-operative workshops in the belief that a new form of economic organization would improve their lot

The standard of life among governesses was at this time little better than that of tailoresses and seamstresses. A common salary was £25 a year, and on that they were expected to dress "like a lady" and make provision for sickness and old age. The profession, if one may so call it, was overcrowded because regarded as the only one open to females "of gentle birth" and the last hope of impoverished spinsters In 1841 a Governesses' Benevolent Institution was founded "to afford assistance privately and delicately to ladies in temporary distress" The demands on the Institution revealed unrealized depths of misery and poverty. The influence of his sister, herself a governess and voluntary worker in the Institution, aroused the interest of Frederick Maurice in their plight Believing that the only hope was to improve the standards of the profession, Maurice and his friends enlisted the goodwill of a committee of professors of King's College, London, to issue certificates of fitness to governesses With the assistance of Charles Kingsley a series of "Lectures to Ladies" started in 1847. About the same time a Miss Murray, one of the Queen's Ladies in Waiting, was planning along the same lines, and both schemes were united in the Governesses' Benevolent Association.

The lectures proved to be highly successful and soon developed into a regular institution. Thus it was that Queen's College for Women came into existence in 1848. Two of its first students—Miss Beale and Miss Buss—became pioneers in women's education, the former at Cheltenham and the latter at the North London Collegiate School for Ladies (Figs. 60 and 61).

Meantime women were hammering at the doors of the universities. In 1866 Cambridge permitted them to sit the Local Examinations, an innovation regarded by many as detrimental to a woman's character. One headmistress declared "that it would foster the spirit of confidence and independence which is too common amongst girls of the present day." Fortunately others thought differently. The admission of women to university examination was a first step to storming the citadel itself. Bedford College for Women, founded twenty years earlier, had already become a centre of higher education for women in London. Now women approached the ancient universities, first for extension lectures, and then for lectures within the universities themselves. Foremost among pioneers of higher education for women was Emily Davies. Having failed to secure the opening of London University to women, she proceeded to plan a separate college for them, independent and academic, but associated for teaching and examinations with one of the existing men's universities. As early as 1866 she was discussing this plan with some of her friends. Her idea was to get together "a large general committee of distinguished people to guarantee our sanity and an executive to do the work," she writes:

"If we can get Lord Lyttelton, who has the reputation of being rather High Church, to be our Chairman, and Lady Goldsmid to be the treasurer, I think the comprehensiveness of the scheme will be pretty well guaranteed."

Inevitably progress was slow. "We had an exciting debate over the College project," she writes.

"Lady Goldsmid, who could not come, wrote to say that she could not make up her mind to take any part at present. She thought we had better wait till the ferment about the franchise is over. Mr. Gurney sent word that he could not give his adhesion till he knew more about the domestic arrangements and how the young ladies were to be looked after. Mr. Hastings said he would do anything he could for us, and then went away. (He had an engagement.) . . . Miss Bostock opposed, Mrs. Wedgwood hesitated, Mr. Tomkinson and Mr. Clay were very strongly in favour. Mrs. Wedgwood asked whether we thought young women would like to go from home to College, and then our side had to admit that the weak point of our scheme was that the girls would want to come and would hate to go home."

Though Emily Davies had planned to raise £30,000, only £2,000 had been collected by the summer of 1867, but by this time she had got together a carefully selected general committee. So plans went ahead. Meantime a rather different plan for the provision of university education for women was maturing in the north of England, under the leadership of Miss Anne Jemima Clough, also prominent as a pioneer in the movement for the Higher Education for Women. Her aim was to provide university extension lectures

for women, given by university lecturers in neighbouring towns. An organization called the North of England Council was formed, with Miss Clough as secretary and Mrs. Butler, wife of the Principal of the Liverpool College, as president. In October 1867 James Stuart, a young Cambridge don, agreed to come north and lecture on astronomy. Members of the Council anxiously went about persuading and cajoling schoolmistresses and others to attend. They need not have been so anxious. When the course started the lecture rooms were crowded with earnest and diligent students. Stuart had proposed setting aside time for questions, but it was regarded as improper for young ladies to ask questions of a young man Accordingly he arranged to have his questions printed and to ask for written answers. As he put it in his *Reminiscences*, this forestalled "all the dangers attaching to personal intercourse" To his surprise Stuart was snowed under with queries.

Miss Davies's plan was different It was none other than the establishment of a women's college at Cambridge The lecturers would come from there and in all probability the examiners In the fullness of time degrees from the same university would also be forthcoming. In 1869 she persuaded her committee to take a house at Hitchin, near enough and yet at a safe distance from the sacred city. With some trepidation she began to select her students. Twenty-one candidates presented themselves for the entrance examination, sixteen passed, and six, the maximum number for whom there was accommodation, were actually admitted, when the great enterprise started in October 1869. The pioneers took up residence. Cramped quarters and the inconvenience of being so far removed from Cambridge led, four years later, to the transference of "the college" to Girton, two miles from Cambridge—a distance sufficient "to give the necessary feeling of safety to parents."

While Girton was finding its feet and extension lectures were going from strength to strength in Liverpool and Leeds, Henry Sidgwick conceived the idea of running similar lectures in Cambridge itself. Success was immediate. Each term saw the number of students increase. Some girls actually came to lodge with friends near the university so as to attend the lectures. The need for accommodation for girls who had come from a distance prompted a project for a hall of residence. With his own savings Sidgwick purchased a small house in Cambridge in 1871. Miss Clough consented to preside over what was the forerunner of Newnham College It was a small, unpretentious house, with scant comforts for the students in residence Over-anxious to make it a model of propriety, Miss Clough guarded her wards jealously. At all times they had to be chaperoned. Even at lectures, Miss Clough herself or some other proper person had to sit patiently knitting; and all social invitations must needs be carefully scrutinized. Despite all this, the popularity of the *house* increased each term New buildings were purchased but soon found to be inadequate. In 1874 it was decided to build at Newnham, and two years later the College opened its doors

Oxford was somewhat more tardy Lady Margaret Hall and Somerville College opened in 1879, St. Hugh's in 1886, and St. Hilda's in 1895. Here, too, the women were closely guarded. They could not attend lectures or tutorials. They could not even go shopping unless satisfactorily accompanied by chaperons. They were also enjoined to "dress carefully and have gentle

manners" Members of these colleges, whether at Cambridge or Oxford, were not admitted as members of either university. They could attend lectures and take examinations, thus demonstrating their equality with men, but full membership of the university was not granted to women at Oxford until 1920. In 1923 Cambridge admitted women to degrees but not to full membership of the body academic London University, on the other hand, granted women the same status as men in 1880, and as provincial colleges and universities were founded similar privileges were granted by them (Fig 62).

In Scotland, where class differences with respect to educational opportunities were less clear-cut than in England, the movement for the higher education of women was less spectacular. The reason for this is also due to the fact that Scotland early adopted the practice of educating boys and girls in the same classroom. The first move to admit women to the universities was made in Glasgow. In 1883 Queen Margaret College for Women was founded. A few years later it was incorporated in the university. Until the end of the war of 1914–18 it provided a separate establishment for women reading for degrees Since then it has been closed. Women now sit in the same class rooms as men

An Act of 1889 had set up an executive commission with powers to regulate, among other things, the admission of women to instruction and graduation In 1893 they issued an ordinance admitting women into medicine or any other faculty on the same terms as men. By the end of the Victorian era women had therefore secured an equal place with men in the provincial universities of England as well as in the older Scottish universities, except in Edinburgh, where they were excluded from medical classes for another twenty years. The question of their admission to learned societies was raised in 1902, when Mrs Ayrton's name was put before the Royal Society. Counsel's opinion was taken. The Society was advised that it could not elect women without a new charter The matter was therefore dropped In the following year the Linnean Society applied for a new charter and admitted women. A short time before, the Royal College of Physicians had refused to admit women, while the Royal College of Surgeons welcomed them. There is now no legal barrier to the election of women to the Royal Society, and there is no mean number of women members of the Royal College of Physicians or Fellows of the Royal College of Surgeons.

WOMEN AND THE HOME

Women are still handicapped by the age-old tradition that man is the breadwinner and that woman's place is the home If a young woman works in a factory or an office, it is commonly believed to be a subsidiary phase of her life. The ideal to which all women are supposed to aspire, and to which in fact most of them still do aspire, is a married state withdrawn from "gainful employment," ostensibly to rear children and manage a home. When a woman teacher or civil servant marries, she is usually expected or compelled to resign her post, presumably on the assumption that her place is now the home. If, in other walks of life, women carry on work after

marriage, as many working women do from economic necessity, the common belief is that it is either unfortunate or undesirable. No one condemns a husband with more than one source of remuneration, but a woman who brings into the house an extra income is deemed to be taking the bread out of someone's mouth. Implicit in such a social attitude is a view held by most husbands who esteem it as unmanly to be dependent on the earnings of the wife. He himself must be independent, she dependent on him, responsible for the disbursement of his income, while he remains in supreme control

These views die hard, though the conditions they presuppose have been largely undermined, if only by the invention of labour-saving devices which lighten the task of the housewife. It is true that most houses are vastly out-of-date owing to the cost of equipment and a fashion of building which precludes countless people from taking advantage of the fruits of modern science Still, the kind of work that kept the Victorian woman busy—knitting, sewing, baking, laundry, washing, etc., can now be done to a large extent by mechanical agencies Sewing machines, vacuum cleaners and other electrical contrivances are eliminating the drudgery of the home. Modern design and modern furniture conspire to the same end. Another circumstance destructive to the assumption that woman's place is the home is the growing number of underpaid black-coated workers who marry on the tacit assumption that they cannot afford to have a family The women of this class practise idleness without enjoying riches, and their ranks are swelled by an increasing number of more prosperous women who decline or fail to have children. In a world in which life is more mobile than ever before, a world in which the restless spirit of men and women can avail itself of novel methods of transport and amusement, child-bearing and the responsibilities that result therefrom have become a burden to be avoided. Numberless social agencies offer attractions of a more varied life beyond the home, and small families have become the rule. Though it is true that we need larger families to maintain our population at the replacement level, unless we rely on immigration to save us from eventual extinction, it is equally true that the present level of infant mortality militates against the growth of population.

Various innovations, technical and institutional, have thus opened the door to greater leisure, but leisure for what? As the small family grows up the modern woman is left with more and more time on her hands. With paid domestic help, the middle-class woman, especially, finds that she is unoccupied for the greater part of the day before her children have reached their 'teens. While they are growing up to school age she is fully engaged in what should be a highly skilled and responsible job of carrying them through their first vital years. If she takes it seriously, she strives to take full advantage of recent scientific knowledge on the feeding or psychology of children The more enlightened attend lectures on these subjects. They read books, and there are now many women's journals which do convey modern ideas about diet and the general conduct of the nursery; but when the children pass beyond this stage, the married woman who has no gainful employment finds that the productive phase of her life is approaching its end, albeit one which has been full of interest and worth-while achievement

But what of the next phase? What is there for the woman who has passed her fortieth birthday? Is her place still the home? If it is, what is she to do? Doubtless many married women are fully occupied in their homes long after this age, but a growing number demand some new outlet for their energies The majority still find that their leisure gives them more time for dress, for shopping, for tea parties and for playing bridge. Their old occupations no longer want them, and they may have no inclination to return to them. A minority get satisfaction from philanthropic work, from organizing church bazaars or from playing a part in local politics, but the mass of women remain unoccupied, a danger to themselves and to society.

"These millions of under-occupied citizens," says H. G Wells, "have votes, control expenditure and exercise great influence on the general body of opinion. If they are to be left to themselves because they are uninteresting, left to a narrow and frivolous personal life, the world is creating for itself a force of ignorance, prejudice and self-satisfaction, an atmosphere of mental stuffiness, and sluttishness, which will impede all efforts to clear and widen thought and to build the future upon a controlled and courageous use of knowledge"

WOMEN'S EMPLOYMENT

It is impossible to state with precision how many women were dependent on wages in Victorian days. There were so many, married, widows and spinsters, who plied needle and thread in their spare time or whole time, in their cottages or garrets, making clothes, hats and the hundred and one things for which there was a market. Most of them were not independent. They worked for manufacturers. They were sweated workers whose continued employment depended on the necessity of accepting a low standard of life. The Census of 1851 gives us a picture of conditions at a time when Britain was firmly established as a great manufacturing and commercial nation. In that year there were 10,736,000 females, of whom 8,155,000 were of ten years and upwards The largest occupational group was domestic service with 905,000; and there were 145,000 washerwomen and 55,000 charwomen. Unlike these sweated home workers, the women in the cotton and woollen industries were the product of the machine age. In the former there were 272,000 female workers and in the latter 113,000, while the making of lace, hosiery and linen accounted for 140,000 (Clapham, ii, 24).

In all these occupations women had been employed from the earliest times A rare example of a clash between men and women occurred in the textile industries when weaving, hitherto a man's job, became predominantly a woman's job as power looms replaced hand looms. In 1881 the mass of wage-earning women, according to Clapham, "were still in the same great groups as in 1851—domestic service; the textile industries, the stitching industries, the washing industries" (ii, 466) The women drudges in the domestic and outwork jobs were leaving their wretched garrets for the factory, while new employments, like clerking, were developing slowly. The appointment of women as telegraph operators touched the fringe of a new and wide range of occupations; and during the three decades before the First World War opened the flood gates of destruction, the sphere of women's

employment enormously widened. Under the influence of new opportunities created by education and fostered by the development of the light-machine industries, women entered new occupations.

A comparison of the Censuses of 1891 and 1911 reveals some significant trends (Clapham, iii, 471–2). Contraction of employment in the sweated and outwork industries continued, as machinery and trade union activity checked the worst abuses. Seamstresses and washerwomen declined in numbers as factories and laundries took over their work. The number of domestic servants had fallen as new opportunities expanded. In the sweated metal trades, such as nail and chain making, there had been a fall, but the total number of women metal-workers was steadily increasing as the adoption of light machinery progressed. Women workers were specially in demand in cycle and motor works, in the Sheffield and Birmingham trades, and in the new and expanding electrical industries. The most striking change occurred in business offices The male clerk who pushed a pen was in retreat before the girl who could use a typewriter. In 1851 there had been 19 female clerks; in 1881, 7,000, and in 1891, 22,000. By 1911 their numbers had jumped to 146,000 Large numbers of women were now employed in shops where they had firmly established themselves by 1880. These new employments were mainly recruited from the families of black-coated workers, clerks, small tradesmen and the poorer professional groups. The girls of the wage-earning class commonly found their way into the factories and domestic service. By this time there were many new preserved food factories producing chocolate, jam, biscuits. These, and the tobacco industry, were expanding as the standard of living rose. In all of them women were playing a predominant part.

On the whole, middle-class women still clung to the view that work outside the home was not for ladies, but those who came under the influence of the women's movement were no longer content to forgo the openings now offered them by new industries, by commerce and by the teaching profession which provided them with opportunities of useful service. After initial disorganization and unemployment when war came in 1914, almost the whole field of industry was thrown open to women. It was now patriotic and honourable for women to enter employment. To the astonishment of employers and the public alike, they proved efficient and competent. The high wages they received gave them an independence they had never before experienced, and when war was over there could be no return to the old conditions of household drudgery or social uselessness. In 1919 Parliament, as we have seen, passed the Sex Disqualification (Removal) Act. Women were no longer to be disqualified from any profession or employment on grounds of sex. "The right to work" had been established. A revolution had been effected in the home.

"By 1931," says Miss Strachey,* "only thirteen out of every hundred girls of eighteen were living in idleness The rest were already at work or were preparing to undertake it." Between 1921 and 1931 the number of women "gainfully employed" rose from 5,000,000 to 5,600,000. Personal service, including, besides domestic servants, waitresses, shop assistants,

* *Our Freedom*, 1936, 137

in fact, all who render direct service to consumers, was the largest occupational group, accounting for 1,926,978. The textile industries, still predominantly a female occupation, had 463,000. In these industries there was little competition between men and women In the new manufacturing industries, such as electrical engineering or the cycle and motor trades, women were acting as machine minders under male supervision. The largest influx of women occurred in the group designated by the Census authorities as Commerce, Finance and Insurance, i.e. clerks, book-keepers, cashiers, and typists. In 1911 there were 146,000 women employed under this heading, in 1921, 925,751; and in 1931, 1,184,778

These occupations appeal chiefly to daughters of the black-coated workers and the lower middle class in general. In them, women compete with men of the same social class Thus rivalry between men and women for the same employments is largely concentrated in the lower middle-class strata. Hence the eagerness with which public authorities dismiss married women. The profession in which women predominate is teaching. In 1931, for instance, there were 199,560 women teachers against 84,346 men. Over a large part of the field of education there is nevertheless little competition between the sexes. This is not true of medicine. In the medical profession the number of fully qualified women was 1,253 in 1921. It was 5,391 in 1931. This last figure is less than 10 per cent of the total names on the medical register In the Civil Service there were 79,364 women in 1931, as against 235,775 men. Thus increased employment of women has been mainly in expanding vocations. They have not conspicuously displaced men in those traditionally monopolized by men except in so far as the demand for male personnel exceeded the supply. In the inter-war period, unemployment has been greatest in those industries which are predominantly male

Despite increased opportunities for women in industry, commerce and the professions, marriage is still the prize to which most women aspire. Hence the age of women "gainfully employed" is low. "In six out of the eight chief women-employing industries, 40 per cent or more of the women are between 14 and 25," say Carr-Saunders and Caradog Jones (*Social Structure*, 45). In the textile industries the tendency is for women to continue their employment after marriage, but elsewhere, either from compulsion or inclination, they resign. Since women usually regard work in the factory or the office as temporary and during employment often live at home, they are willing to accept lower wages than men, and under such conditions employers readily engage them. Eagerness to employ women on such terms is an exiguous guarantee for the security of their recent conquests. While the majority of women, no less than the majority of men, regard woman's work outside the home as a makeshift before disembarkation in the alluring port of matrimony, the prospects of women who prefer to maintain their economic independence with or without wedlock will inevitably be handicapped in competition with men for the same jobs If the male, smarting under the legal responsibility of providing financially for wife and children, is able to enforce equal pay for equal work, there is no longer any special reason for engaging women workers to do tasks men can do as well. On the contrary, employing bodies are bound to discriminate in favour of the

male applicant or the male candidate for promotion as a safer investment, if only because his inclinations and aspirations are more predictable as they now stand. Thus the future scope of women's employment is inextricably involved in the future of the institution of marriage as a means of producing families Western civilization is now threatened with extinction unless women can be induced to have larger families. To what extent the recent trend for greater participation of women in activities outside the home will go farther thus depends on whether we are able to discover ways and means of making parenthood more attractive without restricting women's opportunities for choice of work.

PART IV

Other Human Beings

CHAPTER XIV

COMMUNICATIONS

THE preoccupation of historians with political, constitutional and diplomatic history has emphasized differences between nations, and the inevitable conflicts that have arisen from the claim of every nation to complete sovereign rights. It is refreshing to consider an aspect of history which stresses the unity of nations and the means whereby it has been promoted In previous chapters we have seen that trade and commerce have everywhere extended beyond political boundaries and have, in fact, brought the nations of the world into the same economic system In this chapter we shall consider the way in which transport, the telegraph, the telephone, broadcasting, the printed word and the film have created a new world order, making political boundaries, behind which each state defends its sovereignty, anachronisms Diversity is compatible with unity. So this does not mean that there is no room for variety in culture and social institutions It means that innumerable ties to-day bind the peoples of the world together. There are interests that are common to all, and the time fast approaches when community of interest will take shape as stable international government.

In this process of unification the means of transport have played a major role For centuries roads were mere tracks, dangerous alike to man and beast. Commerce, such as it was, moved slowly, along the rivers of Asia, of Egypt, and of Europe. The great Yellow River, the Ganges, the Euphrates, the Nile, the Danube, the Rhine, and countless less important ones were the highways of trade They were more, they were connecting links between the early civilizations of the world. Along their broad waters moved goods and men. Knowledge passed slowly from one part of the world to another. Where water transport was impossible, the goods were transferred to pack-horses or camels, and so between the river systems of the world, trade trickled slowly and fitfully. Towns sprang up beside the rivers of the ancient world as they sprang up on the banks of the Mississippi during the expansion of the United States In the early centuries of the world's history, sea-transport was of little consequence, for the dangers of the unknown were sufficient to check the most adventurous. The sea was seemingly the ultimate barrier. What lay beyond no one knew, maybe an endless waste of water, maybe a forbidding land inhabited by evil spirits. Eventually pirates or emigrants or traders ventured into the vastness of the ocean In classical times, sea-traders of Egypt, Phoenicia, and Greece were linking together Asia and Europe; but for many centuries the rivers still remained the most convenient

and most frequented routes of traders and travellers Priests and barons who had to make a journey followed the well-worn routes of the merchants.

The disruption of the Roman Empire did not destroy, though it seriously curtailed, Mediterranean commerce. Europe carried on the traditions of the sea, sending its galleys to the eastern Mediterranean and through the Straits of Gibraltar to England and the Low Countries. Meantime the Hanse merchants of the Baltic were adding their quota to the advance of sea transport and the community of nations by their shipments to the Low Countries From Marseilles, from Bordeaux, from London, and from Bristol, sea transport spread across the known waters of Europe.

Towards the end of the Middle Ages the science of shipbuilding, as well as the study of map-making, navigation and astronomy, were greatly stimulated by the anxiety of merchants and sailors to discover new routes of commerce. Encouraged by Prince Henry the Navigator, who had established a school of navigation at Segres, staffed by Arab and Jewish cartographers, the Portuguese led the world in shipbuilding and exploration. New knowledge brought home by sailors and merchants and pilots skilled in the new science of navigation was pieced together Flemish cartographers at Bruges and Antwerp produced maps which, now that the art of printing was known, were widely circulated.

Both instruments of navigation and the ships themselves were vastly improved. The galleon, larger, more seaworthy, faster and of greater carrying capacity, replaced the Portuguese caravel or the ordinary roundship. It was not only shipbuilding and navigation, however, that were stimulated by this vast extension in the material framework of the world. Every department of life was agitated Physical science, medicine, horticulture, and the industrial arts were galvanized into activity, and men were shaken out of their old ways of living The whole centre of gravity of European life was changed as economic life, long at home in the Mediterranean, now settled in the Low Countries and in the lands washed by the Atlantic Ocean. The next three centuries witnessed great commercial and colonizing activity. Many places, it is true, were untouched by the tide of knowledge and speculation that was now let loose But it was an age of overseas trade, of shipping, and empires. Towns that now sprang into importance were all within reach of tide water.

RIVERS, CANALS AND ROADS

Along the great river system of Europe goods moved steadily and slowly throughout the centuries, as they still do to-day. The Rhine, the Danube, the Elbe, the Seine, the Rhone, the Volga were arteries of commerce and travel. Their broad waters flowed across the Continent with a fine disregard of political frontiers, serving the needs of German and Frenchman, Rumanian and Austrian alike. It is true that states and municipalities tried to check the free flow of commerce by levying tolls where the waters crossed their thresholds Even in 1800 there were no less than fourteen tolls on the Elbe, between Hamburg and Magdeburg, and thirty-three on the Main between Bamberg and Mainz. The international character of these great waterways

was recognized at the Congress of Vienna, when they were declared open to the ships of all nations. But it took the Great Powers sixteen years to regulate the international status of the Rhine. The creation of the Polish Corridor was an attempt to guarantee to Poland the right of navigation on the Vistula, and this was done at the cost of separating East Prussia from the rest of Germany. The solution, based on narrow nationalist grounds, precipitated the war which began in 1939.

In North America, the Hudson, the St. Lawrence, the Mississippi and their tributaries, and the Great Lakes were the routes of commerce before the days of railways. In China the Yellow River still carries its cargoes as it has done since the dawn of history. Some rivers are unsuitable for traffic. In Africa, for instance, they are too fast-flowing. So the interior of Africa was uncharted and untouched until the days of steam locomotion. Stretching away from the river systems of a world without railroads, there were well-worn tracks along which pack-horses laden with goods picked their way In England and Scotland, the convoy of pack-horses was a familiar sight in the eighteenth century.* A contemporary writer thus describes Manchester:

"When the Manchester trade began to extend, the chapmen used to keep gangs of pack-horses, and accompany them to the principal towns with goods in packs, which they opened and sold to shopkeepers, lodging what was unsold in small stores at the inns The pack-horses brought back sheep's wool which was bought on the journey and sold to the makers of worsted yarn at Manchester, or to the clothiers at Rochdale, Saddleworth, and the West Riding of Yorkshire"

Long after the English and the Dutch struggled for supremacy in the Far East, the caravan of camels still followed the centuries-old track across the burning desert from China to the shores of the Mediterranean. In Europe, paths led to the great rivers where the chief towns lay. Even in 1830 the lives of people over a large part of the continent of Europe were little touched by foreign influence Farther east there was far more self-sufficiency. Exchange of ordinary everyday things took place at weekly markets. For more unusual things peasant and craftsman had to await the visit of the pedlar from distant parts Not so long ago the pedlar with his pack on his back was still a familiar sight in the Highlands of Scotland.

The first big improvement in inland transport was the deepening of rivers In the seventeenth century France had done much to make her excellent river system more completely navigable. In 1681 French engineers drove the famous Canal du Languedoc through a mountain to join the Atlantic to the Mediterranean. The great work of Sully, Richelieu and Colbert continued during the next hundred years. In the eighteenth century, Arthur Young came back from his travels enthusiastic about France's waterways, canals and roads. Napoleon carried on the same tradition, and left a fine system of planned roads and navigations When the allied troops withdrew, there were further improvements. By 1900 France had 7,500 miles of improved rivers and canals

England had done much to deepen her rivers before the Duke of Bridge-

* Daniels, *The Early English Cotton Industry*, 1920, 61.

water inaugurated the canal era in 1761. Thereafter coal could be carried from his colliery at Worsley to Manchester, seven miles away, at half the cost of land carriage. South England and Scotland were quick to see the great superiority of canals and water-ways over roads. Between 1758 and 1807, 165 Canals Acts were passed. Local canals were built in Yorkshire, in the Midlands, in Lanarkshire, in Aberdeenshire, and elsewhere There was even a proposal for a canal in the Shetland Islands Joining the local canals into a wider system, trunk canals ran southward from Staffordshire to the Thames, from the Mersey to the Ouse in Yorkshire, and to the Trent in Nottingham. In Scotland, the Forth and Clyde, planned as long ago as the days of Charles II, opened for traffic in 1790 The Caledonian Canal, sponsored and financed by the Government and built by Thomas Telford, joined the lochs of the Great Glen, thus making a through route from the Moray Forth to the Firth of Lorne. This one, like those that crossed the Pennines, was a triumph of engineering skill At its extremities harbours were built or improved, and much was done to make the coasts safe for mariners.

Meantime an antiquated and inadequate road system saw improvements. In his *Southern Tour* (1768), Arthur Young writes thus of the roads of his time:

"Of all the roads that ever disgraced this kingdom in the very ages of barbarism, none ever equalled that from Billericay to the King's Head at Tilbury. It is for near twelve miles so narrow that a mouse cannot pass by any carriage. I saw a fellow creep under his waggon to assist me to lift if possible my chaise over a hedge The ruts are of an incredible depth. The trees everywhere overgrow the road, so that it is totally impervious to the sun, except at a few places. And to add to all the infamous circumstances which concur to plague a traveller, I must not forget eternally meeting with chalk-waggons, themselves frequently stuck fast, till a collection of them are in the same situation, that twenty or thirty horses may be tacked to each to draw them out one by one"

Till the middle of the eighteenth century, travelling was usually on horseback. The roads were still too wretched for wheeled vehicles. It took a fortnight to go from Edinburgh to London. Before setting out, a traveller usually made his will and took fond farewell of his friends. A great advance of road transport, especially in France and Britain, began in the second half of the eighteenth century Road construction, almost a lost art in Britain since the decay of the Roman Empire, revived through the efforts of the first great road engineers, Metcalfe, Telford and Macadam. The new industrialism required roads capable of carrying heavy traffic; and they applied their minds to the problem of bringing roads into line with advances in other departments of economic life The planning of roads on national lines was the great contribution of the French. Louis XV had established a body of road engineers, and in 1747 a school for their instruction was set up. There was a system of forced labour, the *corvée*, involving thirty days per annum of public labour. Before the century closed, the road system of France, like its canals, was the admiration of travellers from other countries Throughout the nineteenth century, planning continued and extended from

trunk to local roads At the end of it, France excelled any other country for the quality and efficiency of her road system (Fig. 63).

In Britain, improvement of roads was left to private enterprise. Small partnerships, known as turnpike trusts, had authority by private Acts of Parliament to maintain a certain stretch of road and to recompense themselves by charging tolls. Those toll-houses that survive bear witness to a system which was widespread about 1800. Hitherto roads had been kept in repair by forced labour or statute labour. By levying toll the turnpike trusts secured an income which now enabled them to employ paid labour. The system operated only on certain roads, usually main ones. The great mass of secondary or parish roads remained as bad as ever. Some of the trusts did good work, but many squandered their money and got into financial difficulties, and the multiplicity of monopolies made intelligent planning of road transport impossible Only in the Highlands of Scotland did the State take an active part in the business of road-making, when General Wade and his successors built the military roads, and later when the Commission for Highland Roads and Bridges was established in 1801, with Telford as engineer. The Highways Act of 1835 marked the beginning of a new era. Statute labour was abolished in England, and local authorities had power to levy a rate for road maintenance Eventually the turnpike trusts were wound up, and all control of roads vested in public authorities The claim that roads should be a national burden is now taken for granted Local authorities receive liberal grants from the Exchequer Road Fund, established in 1909.

For many years the railway displaced the roads as the chief avenue of travel, but the invention of the internal combustion engine at the close of the nineteenth century has once more placed them in the front rank of the country's transport system. In using the high road for motor traffic, we are reverting to a practice of a hundred years ago. Motor lorries have taken a great deal of traffic from the railways. Wasteful competition of a few years ago has been eliminated by large transport companies, some of which are now controlled by the railways This has relieved the railroads of much passenger traffic. For freight goods road transport, there is still a multiplicity of small concerns, competing with one another An obvious solution of a problem which has become a national scandal is that the whole transport system of the country should be organized and managed on national lines. Meanwhile, the car and the bus have broken down the isolation of the countryside, and brought districts, hamlets and villages into close association with one another and with the towns. They have accomplished a revolution of everyday life in the countryside Motor transport has also had a profound influence on town life, in so far as it has brought fresh air and new interests to industrial populations. During the last fifty years the bicycle has also played a vital part in this movement of people.

THE RAILWAY

Before the age of steam locomotion, horses were sometimes used to pull wagons on railroads These lines were usually short, connecting pits with iron-works or smelting-works, or the ports The introduction of steam

power in factories naturally suggested steam locomotion. In 1769 the Frenchman, Cugnot, made a steam carriage to run on roads, and in 1801 Trevithick, a Cornish engineer, made a locomotive run on iron rails at his mine. A few years later he built a short railway near London, but his locomotive came to grief, and not having the money to continue his experiments, he abandoned the project. In 1825 George Stephenson built an engine to pull truck-loads of coal from his mines to the Tyne. It attained a speed of four to eight miles an hour while pulling a trainload of ninety tons; and it did the work of forty teams of horses. The price of coal in Stockton soon fell by half. Heavy consumption of coal and the difficulty of negotiating steep gradients later led the company to abandon the locomotive in favour of horses. A year later, a similar railway was built in Scotland to join the coal-field at Coatbridge to the Forth and Clyde Canal. It too reverted to horse power. Some other lines used stationary engines to pull the wagons up an incline, and then they descended by force of gravity, as is still the custom in marshalling yards through the country (Fig. 64).

At the opening of the Manchester and Liverpool line in 1830, Stephenson's improved "Rocket" did the journey of thirty-one miles at an average speed of fourteen miles per hour. This was a notable achievement, and attracted widespread interest Despite the opposition of vested interests such as inn-keepers, canal companies, turnpike trusts, horse-breeders and others, the rage for railways spread. Many companies were formed, and the next twenty years saw over 6,000 miles of railway built. At first, many folk thought that the railway would serve only for the conveyance of coal and bulky commodities over short distances. It was soon clear that an entirely new and different form of transport, which could function as arteries between the great towns, had come into being Before 1840, trunk lines were being planned There was great attention to passenger traffic. By 1850 the modern railway map was taking shape. By 1870 the mileage covered was 15,500, by 1890, 20,000 and in 1910, 23,400.

The railways were built by private enterprise, but since construction involved interference with property, the companies had first to secure a private Act of Parliament. Owing to opposition from vested interests, this was a costly business Between 1845 and 1847 the battle over Railways Bills in Parliament is said to have cost over £10,000,000. After this initial heavy outlay, there was the costly business of purchasing way-leaves and sometimes buying out the opposition of rival canal companies. Writing in 1851, Francis* gives the following prices for land required by the railway companies:

	£
London & South Western	4,000 per mile.
London & Birmingham	6,300 per mile.
Great Western	6,696 per mile.
London & Brighton	8,000 per mile.

When the work of construction commenced, costs were often swollen further by refusal of a landowner to allow the railway to pass through his

* *History of the English Railway*, 203, quoted Knowles, *Industrial and Commercial Revolutions*, 1921, 257

estate In the Liverpool and Manchester Railway Act there was thus a clause that,

"no steam engine shall be set up in the township of Burton Rood or Winwick and no locomotive shall be allowed to pass by the line that shall be considered by Thomas Lord Lilford or by the Rector of Winwick to be a nuisance or annoyance to them from the noise and smoke thereof."

All these heavy costs have made British railways the most highly capitalized in the world. The capital cost per route mile in the United Kingdom has been placed at £54,152, whereas in Prussia the rate was £21,000 and in America less than £13,000 * The complete absence of planning led each company to proceed with its few miles of railway pretty much in its own way Only in the matter of gauge rates and safety devices did the State interfere. In the middle of the century there was a battle royal over the gauge Some favoured Brunel's broad gauge of 7 feet, others Stephenson's narrow gauge of 4 feet 8½ inches In 1846 Parliament decided in favour of the latter.

The movement towards amalgamation and consolidation came from the companies themselves. Nowhere are the advantages of unification and planning more clearly seen than in transport By formal and informal agreements the companies therefore proceeded to eliminate the worst evils of competition In the forties great schemes of consolidation came about, and out of this movement were born such large systems as the Midland, the London and North Western, the Great Northern, and the Caledonian The Victorian believed in competition, and it was only with great reluctance that the State permitted this amalgamation movement to proceed Time after time, commissions of inquiry sat to inquire into the problem. The State was not averse to amalgamation to form trunk lines, but the elimination of competition through the fusion of competing lines was strongly discountenanced. In 1873 the Railway Commission, later renamed the Railway and Canal Commission, was established, and all schemes for amalgamation, as well as rates, had to come before it.

The process of amalgamation had gone far when the war of 1914–18 brought all companies under direct government control Vast economies resulted from this unification, and peace brought the problem of how to consolidate the gains. Some favoured nationalization, others wished to hand the railways back to private enterprise, but to compel the companies to carry through a scheme of comprehensive rationalization The latter won the day. By the Act of 1921, the railways of the country were combined into four large groups—the Great Western; the Southern; the London, Midland and Scottish; and the London and North-Eastern To safeguard consumers, the same Act established the Railway Rates Tribunal, which took over from the Railway and Canal Commission the control of wages and rates. But a large proportion of the wagons still belong to private concerns, with the result that there is much waste and congestion in the sidings and yards of the companies. Transport in Britain still suffers from the lack of vision of

* Knowles, 57

those who built up the system and those who opposed it. Hence it is grossly over-capitalized. We are still paying hard cash to the descendants of those who opposed and those who invested in what was a new venture a century ago, and the deadweight the system carries is a millstone round the necks of the companies and their employees To start with, railways were regarded as competitors of the canals. But competition drove many canal companies into insolvency, and the railway companies bought up others, not for use, but to scrap. Alone among the great countries, Britain has allowed her canal system to become obsolete.

RAILWAYS AND THE CONTINENTAL AREAS

The social importance of railways is that they have opened up the continental areas of the world, crossing frontiers and creating an intimate means of communication between country and country. The customs officer is a sign that the political frontier is still there; but no State barrier can gainsay the international effects of the new means of communication. In Europe, the railway has broken down the isolation of centuries; and played havoc with an economic creed which exalts the benefits of competition. Belgium, independent after a long spell of foreign domination, was the first State to realize their possibilities; and planned in 1834 a bold scheme of railway construction "which should render this small Kingdom the great highway for a large share of the commerce and personal intercourse between some of the chief countries of Europe." This national scheme was carried out with great skill and energy, so that by 1844 Belgium had a system of trunk lines which drew the traffic of northern Europe to Antwerp. State and private enterprise together have contributed to give to Belgium a transport system which, in its completeness, rivals that of any other country By a law of 1842, France planned seven trunk lines radiating from Paris The State leased the land and the road bed to private companies, who laid the rails and provided the rolling stock On the expiry of the lease, the whole property was to pass to the State. Later the State encouraged private enterprise to build branch lines.

The railway had specially important consequences for Germany, because it knit her scattered states together in a single economic unit. Starting in 1835 with a small line from Nuremberg to Furth, the various state governments, galvanized into action by Frederick List, proceeded to plan separate railway systems. Cheapness of land and the absence of serious physical obstacles made expansion easy By 1850 Germany had a much higher railway mileage than France. After the founding of the Empire in 1870, railway building went on at a feverish speed. Each of the states still had its own system, and most were state-owned and state-operated. Bismarck planned an imperial system. His scheme was opposed, but a large measure of uniformity was effected through the Imperial Railway Office, established in 1875. Meantime Russia was taking steps to provide her vast territory with the new transport. In 1855 she had 850 miles, in 1882, 15,000, and in 1914, 47,000. The greatest achievement of the Tsarist regime was the Siberian Railway, completed in 1905. This brought the produce of Siberia

to the Moscow market. After the Revolution the Soviet Government doubled the track, and carried another line southwards to Turkestan.

Everywhere in Europe the railway engineer wove his network of steel rails, bringing each country within a common economic framework. Racing eastwards from Paris, the Orient Express brings Vienna, Budapest, Belgrade, Sofia and Istanbul within easy reach of each other. South-eastwards the Simplon-Orient Express from Paris takes Milan, Trieste, Belgrade, Sofia, and Istanbul in its stride; and from Hamburg the Hamburg-Istanbul brings Germany into direct contact with the Near East. Istanbul is the gateway to Asia, as well as the exit from Europe. Before the war of 1914–18, Germany was planning to carry the railway beyond the Bosporus to Bagdad itself, and into the heart of the mineral and oil fields of Asia Minor and Mesopotamia. This was a challenge to British imperial interests. Thus railroad rivalry contributed to world disaster. The month before hostilities ended, the first train from the Bosporus ran into Aleppo, now securely in the hands of the Allies. Statesmen and people alike tragically failed to see that Europe was fast approaching economic unity, and that political boundaries had become obsolete barriers between narrow-minded, self-seeking parishes

Elsewhere in the world the new means of transport was working economic, social, and political revolution. The United States and Canada advanced westwards as trunk lines were carried from sea to sea The vast lands of the Middle West, of Manitoba, Saskatchewan and Alberta, soon came within reach of New York and Montreal. As the railways reached out this way and that, people flocked to fill the empty spaces, opening mines, felling timber, tilling the land, and ranging the horizon with their herds of cattle. Politically the railway was important, for it accomplished the political unity of Canada and the United States. Along a frontier of several thousand miles, Empire loyalists and American democrats live in closer intercourse than with the majority of their nationals. Without the railway, the vast interior of Africa was beyond the reach of the white man. Swiftly-flowing rivers and the deadly tsetse fly made transport wellnigh impossible This has all changed. Before the close of the nineteenth century, Cecil Rhodes was planning a line from the Cape to Cairo.

STEAMSHIPS

Railways opened up the interiors of continents. Steamships brought the continents within easy reach of each other. Robert Fulton, an American, who had taken home with him one of James Watt's engines, was the first to show the practical possibilities of steam navigation In 1807 his *Clermont* made a journey of 150 miles up the Hudson River in 32 hours. Five years later, Henry Bell opened a new era in Europe when his *Comet* sailed down the Clyde from Glasgow to Dumbarton (Figs. 65 and 66). It took almost a century for the steamship to triumph over the sailing ship. Unlike the railway, the steamer was not a new form of transport capable of serving countries hitherto isolated from the main stream of commerce. Initially, the outstanding drawback of wind as a source of power was that ships with sails were small by modern standards. In 1800 the vast majority of sailing ships ranged

between 100 and 500 tons. They were slow, and had a small carrying capacity. The East Indiaman of 500 to 1,500 tons was quite exceptional. Despite its small size, the sailing ship had great possibilities, and the Americans were the first to realize them Before the end of the Napoleonic War, American shipyards were turning out vessels that were unchallenged on the high seas. By the forties, the clipper had been evolved. Its great length, its fine lines, and its great expanse of canvas fitted it especially for long voyages where speed and comfort were important considerations. The clipper reduced the Atlantic passage by about half. These fast American boats stimulated British shipbuilders, and especially Scots ones, and the Clyde and Aberdeen were soon turning out equally fast and equally beautiful ships.

Many an exciting race took place as the new fast ships speeded home with the first of the tea crop from China, one of the most famous of them in 1866. Sixteen of the best-known and fastest clippers lay at the Pagoda Anchorage at Foochow, loading up the first of the season's tea crop Among the first to get under way were the Clyde-built *Ariel* and the *Taeping*, and the Liverpool *Fiery Cross* They cast off about 11 a m on May 30, 1866. For hours and days they raced together. Then for long stretches they lost sight of one another. When they reached the Cape on July 15th, *Fiery Cross* was leading, followed by *Ariel*. But she was only a few hours ahead. Four days later, all three ships were abreast, with *Taeping* gradually pulling ahead. She passed St. Helena first. The race became fast and furious. At Cape Verde *Ariel* was leading. On August 29th all three passed the Azores within twenty-four hours of each other. At 1.30 a m. on September 5th, *Ariel* sighted the Bishop's Light and, with every inch of canvas set, tore along for the mouth of the Channel. At daybreak a vessel was seen on her starboard quarter. It was the *Taeping*. All day the two ships surged up the Channel together. At midnight Beachy Head was abeam. The race was not yet finished At Deal both ships, almost within a stone's throw of each other, signalled for tugs. In the end, *Ariel* arrived outside the East India Dock gates at 9 p m , and *Taeping* at 10 p m But *Taeping* drew less water than *Ariel*, so she was able to go through the lock first. She docked twenty minutes before *Ariel* Never before or since was there such a close and exciting finish to an ocean race (Fig. 67).

Steamers first came into use on rivers, and especially on the great river system of Europe. On long voyages the sailing ship retained her superiority for many years after steamers were a common sight on river and coasting services. Heavy consumption of coal and imperfections of boilers and engines made long voyages impossible for them. They could plod steadily up-stream, taking in coal as required, carrying passengers and cargo with a speed and regularity, the admiration of all. Indeed, they revolutionized river traffic long before they were extensively used even in coasting services and in narrow seas The success of the Calais packet, 1821, led to the institution of steam services around the coasts, in the Baltic, on the Swiss lakes, and on the Mississippi and the St. Lawrence; but some people were planning ocean voyages at an earlier date. In 1819 the American *Savannah* used steam as auxiliary power to cross the Atlantic After 80 hours her coal was exhausted. For the remainder of the 29½ days she had to depend entirely on sails.

At that time, many thought that it was quite beyond the bounds of practicability to do the entire voyage under steam—one "might as well talk of making a voyage from New York to the moon" In 1833, however, the Canadian *Royal William* used steam and sail on the whole voyage from Nova Scotia to London. She took 20 days. A few years later the British and American Steam Navigation Company's ship, the *Sirius*, did the journey in 16½ days, and the *Great Western*, designed by the engineer Brunel, did it in 13½ days. Meantime, Samuel Cunard was planning a fleet of steamers to carry mails across the Atlantic. In association with Robert Napier, a Glasgow engineer, the Cunard Company was floated. Their first vessel was launched on the Clyde. In July 1840 it made a journey from Liverpool to Boston in 17 days. At the same time the Peninsular and Oriental Company was extending its service to Port Said (Fig. 68), and the Royal Mail Steam Packet Company was sending steamers to the West Indies By the middle of the century the steamer was well established in the coasting service and in the Atlantic Ocean. The invention of the propeller, the introduction of iron for shipbuilding, improvements in boiler and marine engines, all contributed to their wider use. Yet even so the heavy consumption of coal was a severe handicap on long steamship voyages—to the Far East or to Australia, for example. The sailing ship was still the representative ship. In 1847, for example, Britain's mercantile marine consisted of 3,000,000 tons, of which only 116,000 tons were steam. The world tonnage of sailing ships at that time probably amounted to 10,000,000 tons, while steam had only 750,000, of which 500,000 tons were found on the rivers and lakes of North America.

In the second half of the century the steamer made rapid headway. In the main, this was due to the invention of cheap steel. Iron had been used before by a few shipbuilders, but steel, so much more suitable for ships' hulls than either wood or iron, was now quickly taken up by shipbuilders at home and abroad. In 1879 steel steamers on the Clyde represented 10.3 per cent of the total tonnage launched; ten years later the percentage was 97.2. Other circumstances contributing to the triumph of the steamer were more efficient boilers and engines. The compound engine had been invented by Elder in 1854 It was soon followed by the triple and quadruple expansion engines. Final triumph awaited establishment of coaling-stations at convenient points on the great shipping routes, and the opening of the Suez Canal in 1869, which shortened the voyage to the East by 3,000 miles.

In the present century, shipbuilding and marine engineering have made stupendous strides. Invented by Parsons in 1884 to generate electricity, the turbine was being tried out on ships experimentally in place of reciprocating engines at the close of the century. Its economy of space, of energy, of fuel, were at once apparent. In 1905 the first two Atlantic turbine liners were launched. About the same time, oil fuel was being effectively used by warships and liners. It takes up much less space, is more easily loaded, is cleaner, and produces nearly 50 per cent more steam than the same weight of coal Besides, there was an enormous saving of human labour and, happily, of human comfort, because stokers and trimmers were no longer required to sweat and toil in the ship's inferno. The British Admiralty quickly appre-



FIG 81 WINNIPEG TO-DAY

(By permission of the High Commissioner for Canada)

The contrast between this air photograph and the previous illustration shows what progress occurred within the short space of 70 years or so A great modern town, with fine buildings, wide streets, railways and motor-cars, has arisen

(See p. 398)



FIG 82 NEGOTIATING THE TREATY OF WAITANGI, FEBRUARY 1840

(By permission of the High Commissioner for New Zealand)

Representatives of merchants, church and armed forces sit at the table covered with the Union Jack A treaty all ready for acceptance by the Maori is in the hands of the representative of the Royal Navy The Maori in the foreground seems to be trying to negotiate with what prospect of success the setting sufficiently shows

(See p 408)



FIG 83 "WE WILL FIGHT ON FOR EVER"

(Spoken by Rewi (a Maori Warrior) in the last stand against the white man in the Maori War, 1863 *(By permission of the High Commissioner for New Zealand)*

The Maoris fought hard to retain their lands which were alienated when their resistance was crushed by force of arms Though the Maoris were later brought within the body politic, the picture (see also Fig 74) recalls Swift's satire on how the white man founded colonies

(See p 408)

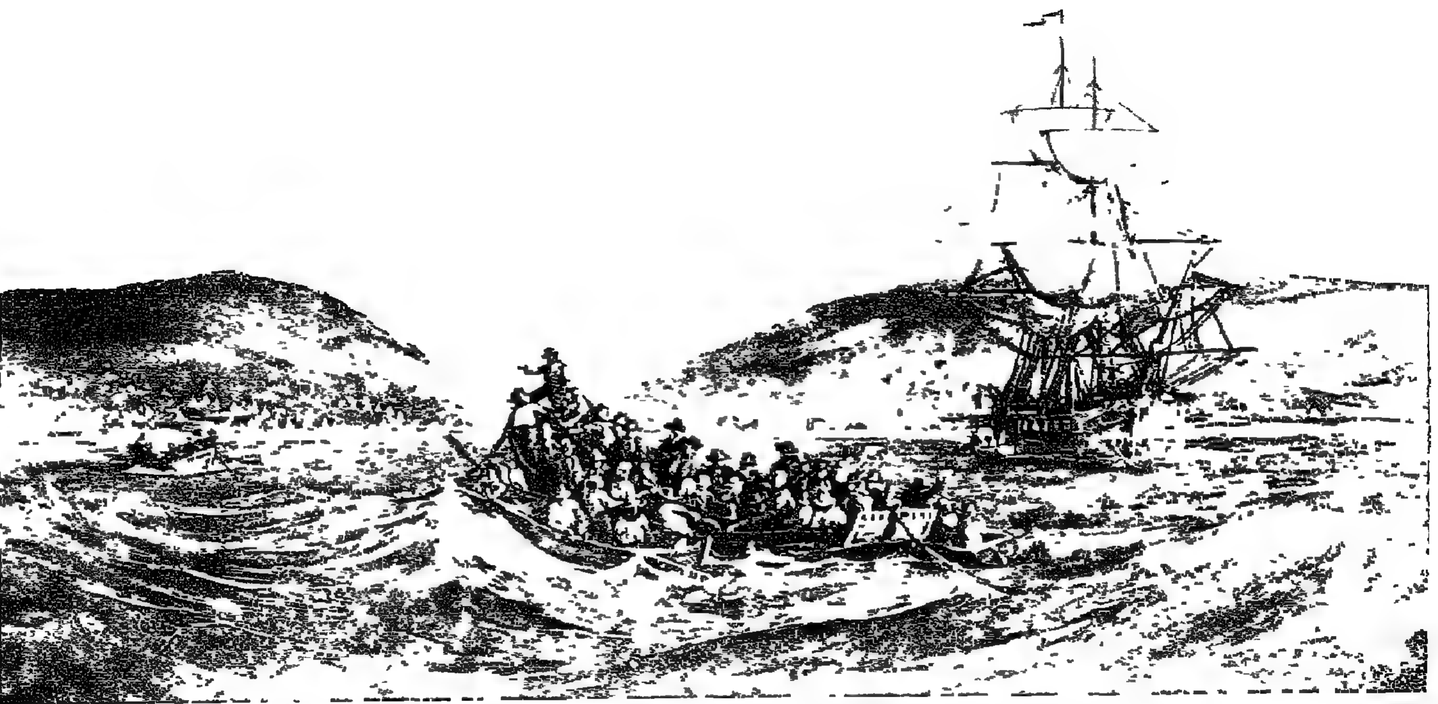


FIG 84 ARRIVAL OF THE 1820 SETTLERS AT ALGOA BAY, NEAR PORT ELIZABETH

(From a Painting by Charles Pears, by permission of South African Railways and Harbours)

Charles Pears here depicts hazards facing emigrants before the days of the modern steamer, when the long voyage in a sailing ship, buffeted by storms, overcrowded and uncomfortable, was an ordeal the emigrant could face only if impelled by economic necessity or by a high adventurous spirit

(See p 419)

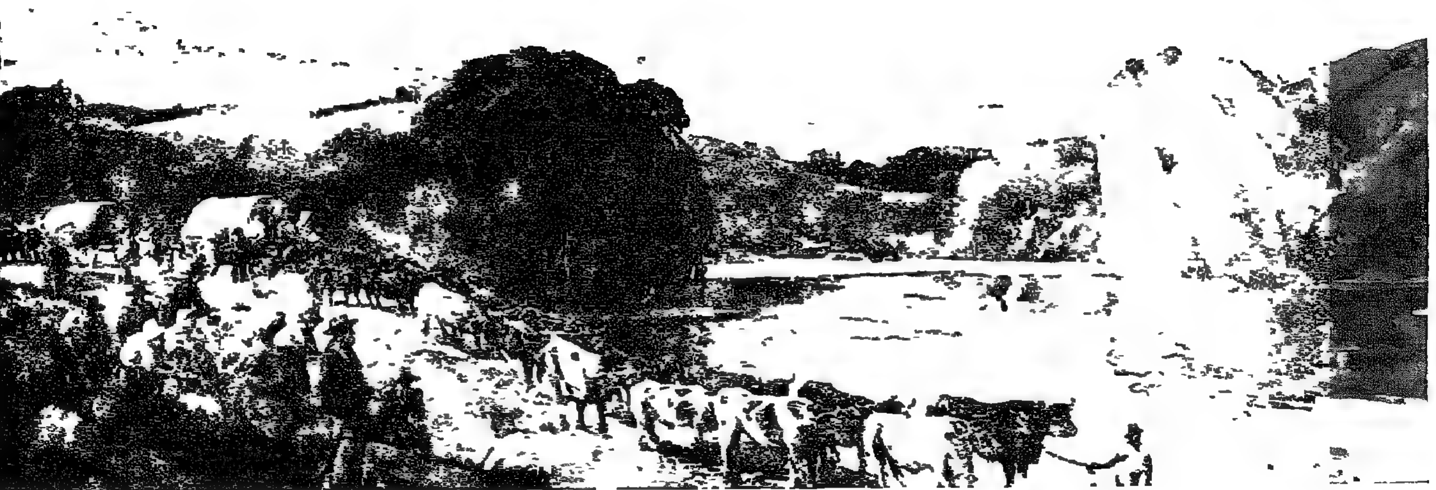


FIG 85 THE GREAT TREK

(From a painting by Charles Pears, by permission of South African Railways and Harbours)

Charles Pears here shows the determination of the Boers who refused to accept British rule and moved, bag and baggage, into a new land where they could continue to work their farms with slave labour

(See p 420)



FIG 86 A NATIVE KRAAL IN ZULULAND

(By permission of South African Railways and Harbours)

The problem of Africa is poverty Living conditions are primitive Methods of farming are inefficient The white man, engaged in mining and industrial pursuits, takes cognisance of the black man only as a source of unskilled wage labour

(See p 431)

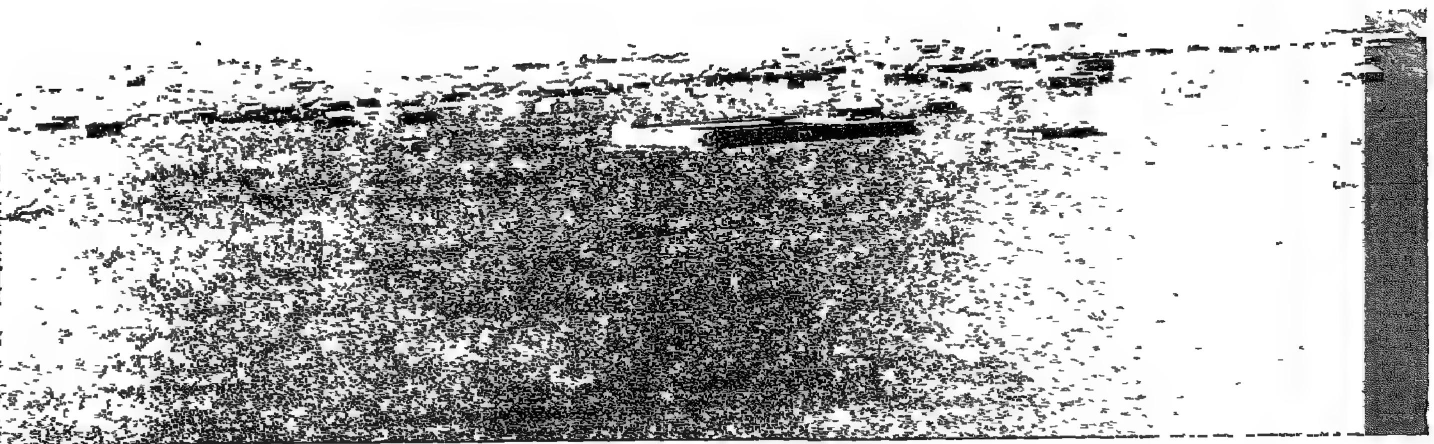


FIG 87 JOHANNESBURG, 1885

(By permission of South African Railways and Harbours)

This hastily constructed settlement, on the gold reef known as the Witwatersrand, pivot of the Boer Republic of Transvaal, was suddenly engulfed in one of the greatest gold rushes of history Over night it became a teeming centre of speculators and gamblers, and of all those for whom gold held the key to riches and power The Boer hated the *Uitlanders*, but were sufficiently alive to their own economic advantage to keep a tight grip on the exploitation of their territory

(See p 434)



FIG 88 PRESIDENT KRUGER AT ARRIVAL OF THE FIRST RAILWAY TRAIN AT BOCKSBURG, TRANSVAAL, 1888

(By permission of South African Railways and Harbours)

A deep gulf separated Boer and Briton, the one represented by Kruger, aloof, bigoted, conservative, the other by Rhodes, enterprising and ruthless in his ambitions The railway, declared by Rhodes to be his right arm, is reaching into the Transvaal, breaking down isolation, the most prized possession of the Boer, and bringing into the heart of their country capitalism in its most aggressive form

(See p 134)



FIG 89 JOHANNESBURG—SKYLINE FROM MINE DUMPS

(By permission of South African Railways and Harbours)

Johannesburg is now a mighty modern city The fever of the gold rush has abated, and the great wealth of the Witwatersrand has come under the control of large capitalist interests using highly technical and up-to-date methods of mining and production Into this great city poured white men and black men, the former as skilled workers and technicians, the latter as *underlings*, a reservoir of cheap labour for the mining companies

(See p 440)



FIG 90 TYPICAL DAUB AND THATCH HUT, TRANSKEI, SOUTH AFRICA

(By permission of South African Railways and Harbours)

From modern Johannesburg, with its skyscrapers, its electrical supply and its modern amenities, we return to the homes of the African people, primitive, devoid of any such devices, and so to the question *what has the white man done for the Black? What does he mean to do?*

(See p 444)

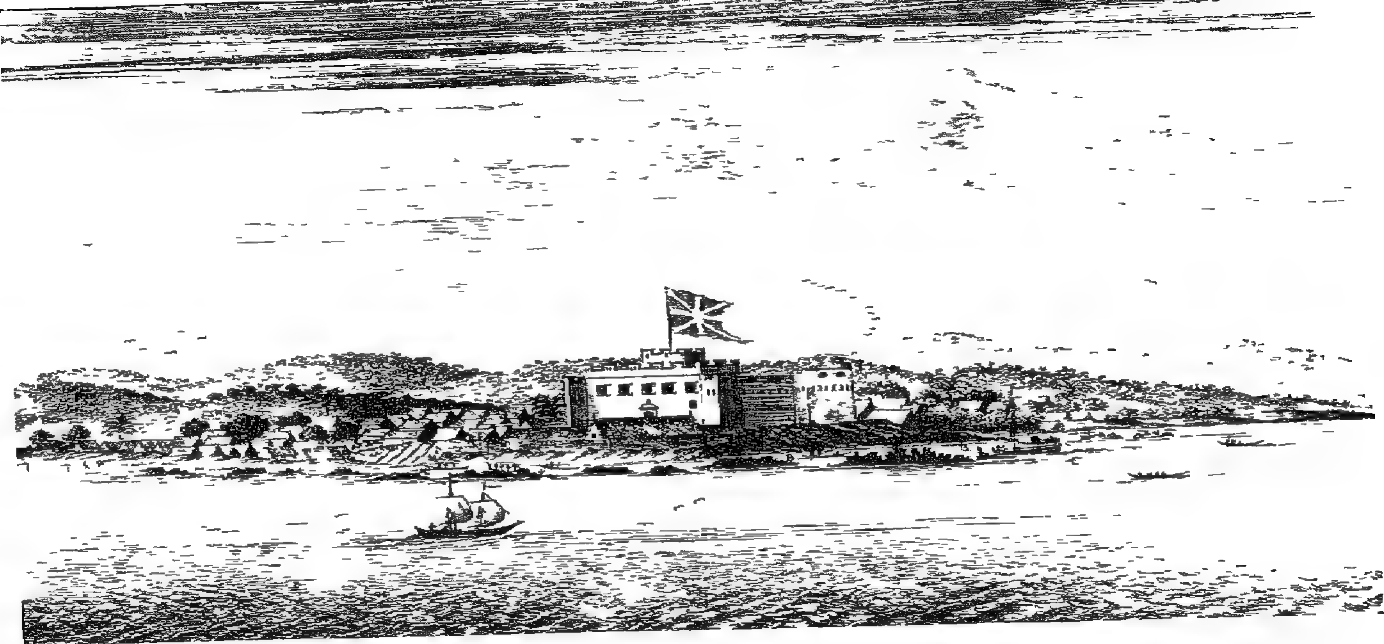


FIG 91 FORT ON GUINEA COAST

(*By permission of the Trustees of the National Maritime Museum*)

With its Union Jack as a symbol of the power of the British trader, this fort, representing the alliance of nationalism and trade, of commerce and the flag, also reminds us that the slave trade could be carried on only at the point of the gun while Europeans were still eager to engage in it After 1807, when the slave trade was abolished in British ships, such forts were necessary for the honourable task of checking the slave trade of other nations

(See p 450)



FIG. 92 SLAVE DEALING ON THE AFRICAN COAST

(By permission of the Trustees of the National Maritime Museum)

Natives uprooted from their country were subjected to all manner of indignities and cruelties as they were examined and despatched by ship White men exchanged trinkets and worthless articles for their human lots Natives, already well versed in slave-dealing, were encouraged to pursue and to extend the trade by the white man's demand for labour in the American plantations

(See p 450)

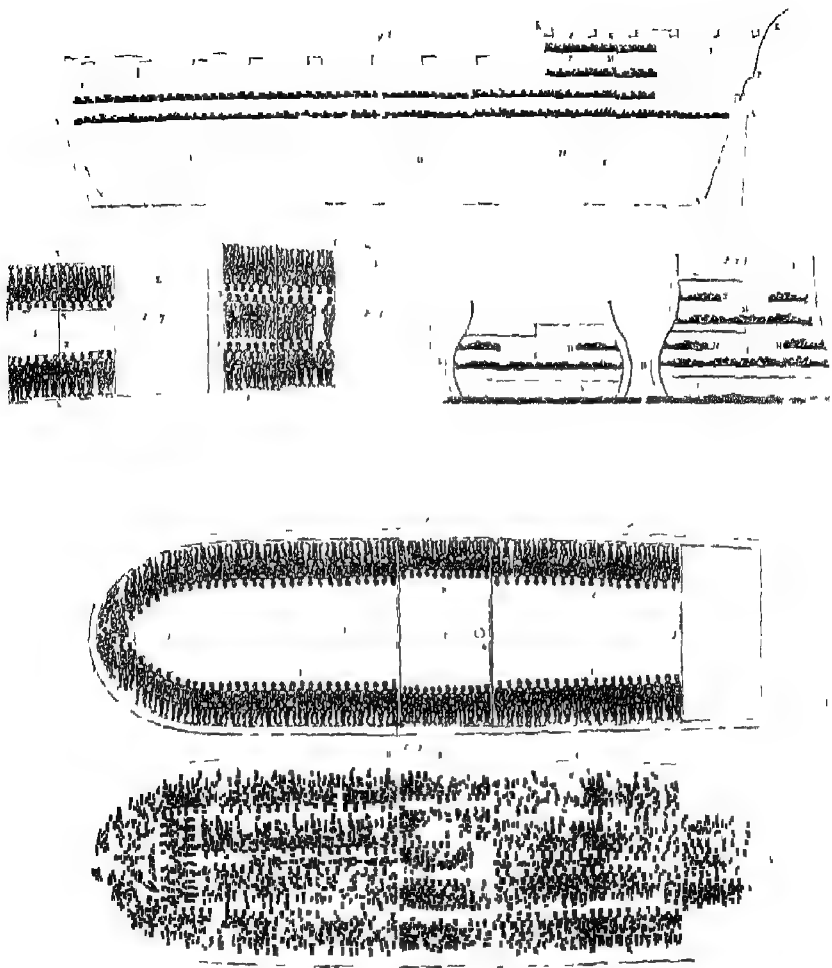


FIG 93 PLAN OF THE STOWAGE OF SLAVES.

(*From Clarkson's* History of the Abolition of African Slave Trade, *by permission of the Trustees of the National Maritime Museum*)

It requires little imagination to realize the horrors of the Middle Passage to the slaves so tightly packed as the plan here shows It now seems almost unbelievable that any human beings could be so callous and cruel as the white man in his search for slave labour

(See p 451)

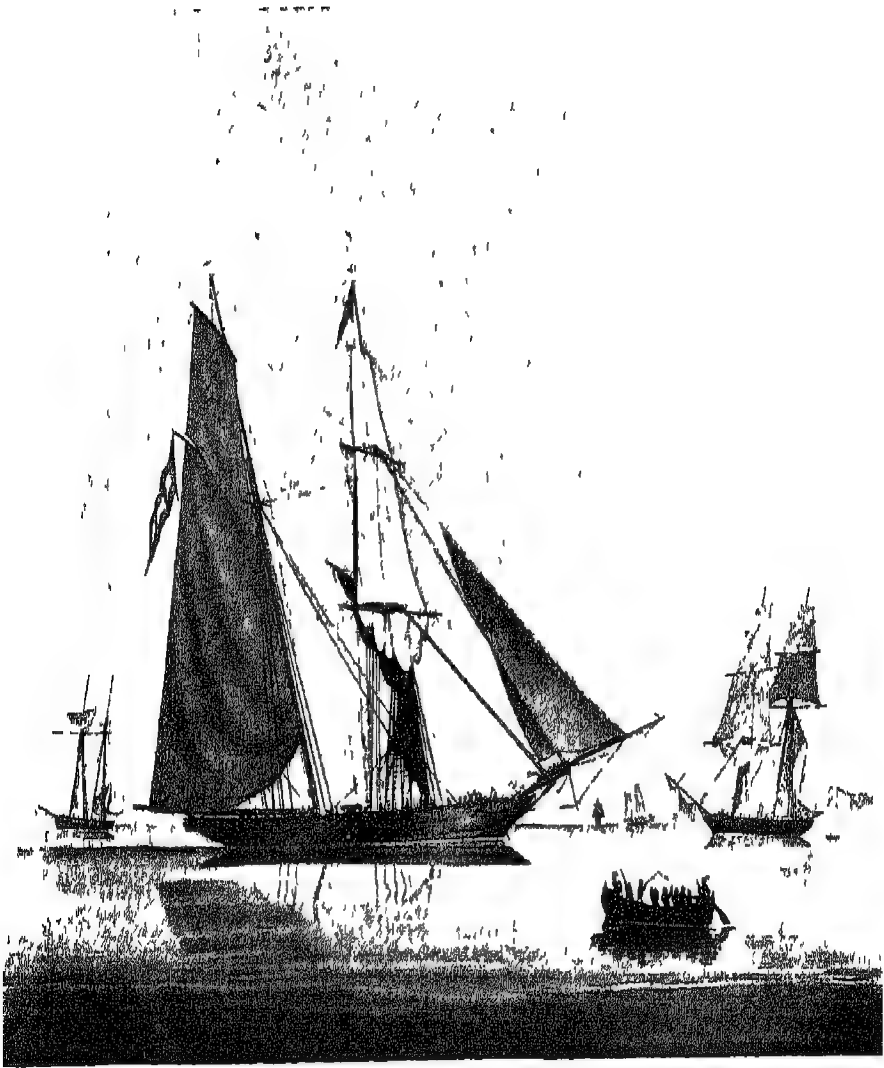


FIG. 94. THE CELEBRATED PIRATICAL SLAVER, *L'ANTONIO*.

(By permission of the Trustees of the National Maritime Museum)

Long after slave-trading in British ships was declared illegal, other nations continued the trade, notably Portuguese, Americans and French British warships played a redoubtable part in stamping out the traffic by the capture of slave ships which would sometimes jettison their cargoes to avoid capture

(See p 459)



FIG 95 ZULUS, NATAL

(By permission of South African Railways and Harbours)

From homes like these the African was persuaded, cajoled or compelled to go to labour in the mines, uprooted from his traditional environment and thrust into new surroundings without prescience or preparation

(See p 464)

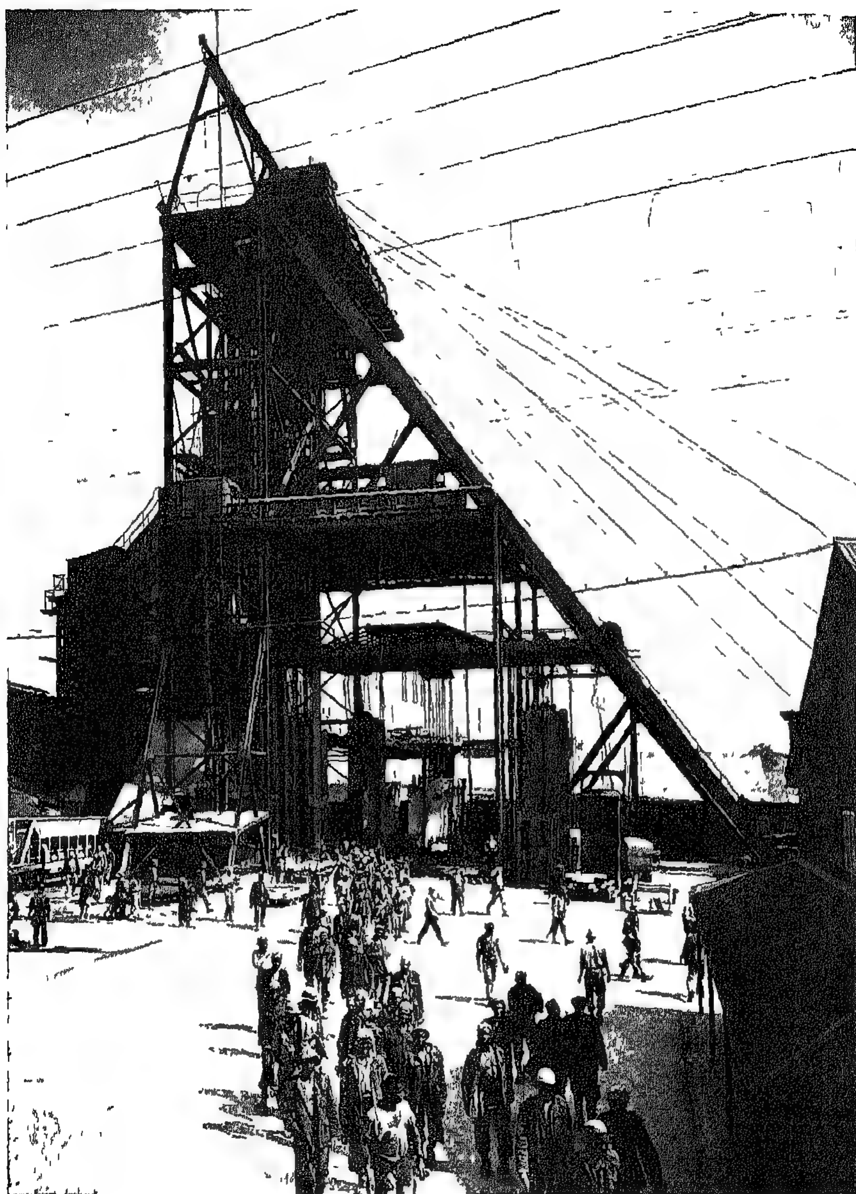


FIG 96 HEADGEAR OF A RAND GOLD MINE SHOWING BLACK LABOURERS LEAVING THE ELEVATOR AFTER WORKING UNDERGROUND

(*By permission of South African Railways and Harbours*)

Fresh from his tribal environment, the African is engulfed by industrialism Black men provide abundant cheap labour demanded by capitalist mining concerns, and the nature of their work determines their social grade Debarred from skilled jobs, by lack of training and by barriers set up by the white unions, the African can undertake only the meanest and most monotonous tasks

(See p 465)

ciated that point, and so oil supply became a political issue Just before the war of 1914–18, 4 per cent of the world's tonnage used oil By 1929 the percentage was 40. Change in fuel was accelerated by use of the Diesel engine. "After four years of difficult experiments," in 1897 Diesel got his first engine to work in his factory at Augsburg. Though used for many other purposes, it was not until 1912 that the first big ship—the *Selandia*—was driven by a Diesel engine. The absence of a boiler and economy both of space and of weight are great advantages.

In this momentous revolution of sea transport, two great canals played a part. The Suez Canal, designed by the French engineer de Lesseps, opened for traffic in 1869. For long the British Government, fearing French influence, had viewed with disfavour any attempt to bring the West too near her vital interests in the East; but when the canal was complete its immense usefulness to commerce was patent. Britain now began to take an interest in Egypt. In 1875 the Government purchased the Khedive's shares By 1882 it had established a protectorate over Egypt. Egypt is now independent; and responsibility for the defence of the canal will soon be hers too. Encouraged by the success of the great enterprise, de Lesseps turned to Panama—a region whose economic importance had been realized by the Scots in their Darien scheme two centuries earlier. After six years' work, the French company faced disaster, its funds exhausted and its labour decimated by fever. The United States Government took up the project, and, benefiting from the work of Sir Ronald Ross and others who participated in the discovery that the carrier of malaria is the mosquito, completed the canal in 1914. Lines of commerce were profoundly influenced by this new route. New York was brought vastly nearer both to the west coast of South America, and to Australia, China and Japan.

THE MOTOR CAR AND THE AEROPLANE

In the present century the internal combustion engine has again opened a new phase in the history of communications. The motor car and the aeroplane have given man a new mobility. The former has brought the town to the countryside. The latter has immeasurably reduced distance and placed the uttermost parts of the world within a few days' travel of each other.

The origin of the internal combustion engine is obscure Daimler was among the first, if not the first, to use it for locomotion. In 1887 he equipped a petrol engine to drive a "four-wheeled, wood-built, light wagonette" Within ten years experiments were in progress at home and abroad, but for technical reasons advance was slow. Even on a small scale, motor car production demanded machine tools and strong, light metal It is significant that motor car manufacture in England was first taken up at Coventry and Birmingham, towns which had already established a reputation in light metal industries. In 1921, Birmingham and district accounted for about one-third of the total employment of the trade Between 1868 and 1895 the growth of armament firms such as Vickers and Armstrong, resulted in great technical improvements of materials and tools for mechanical engin-

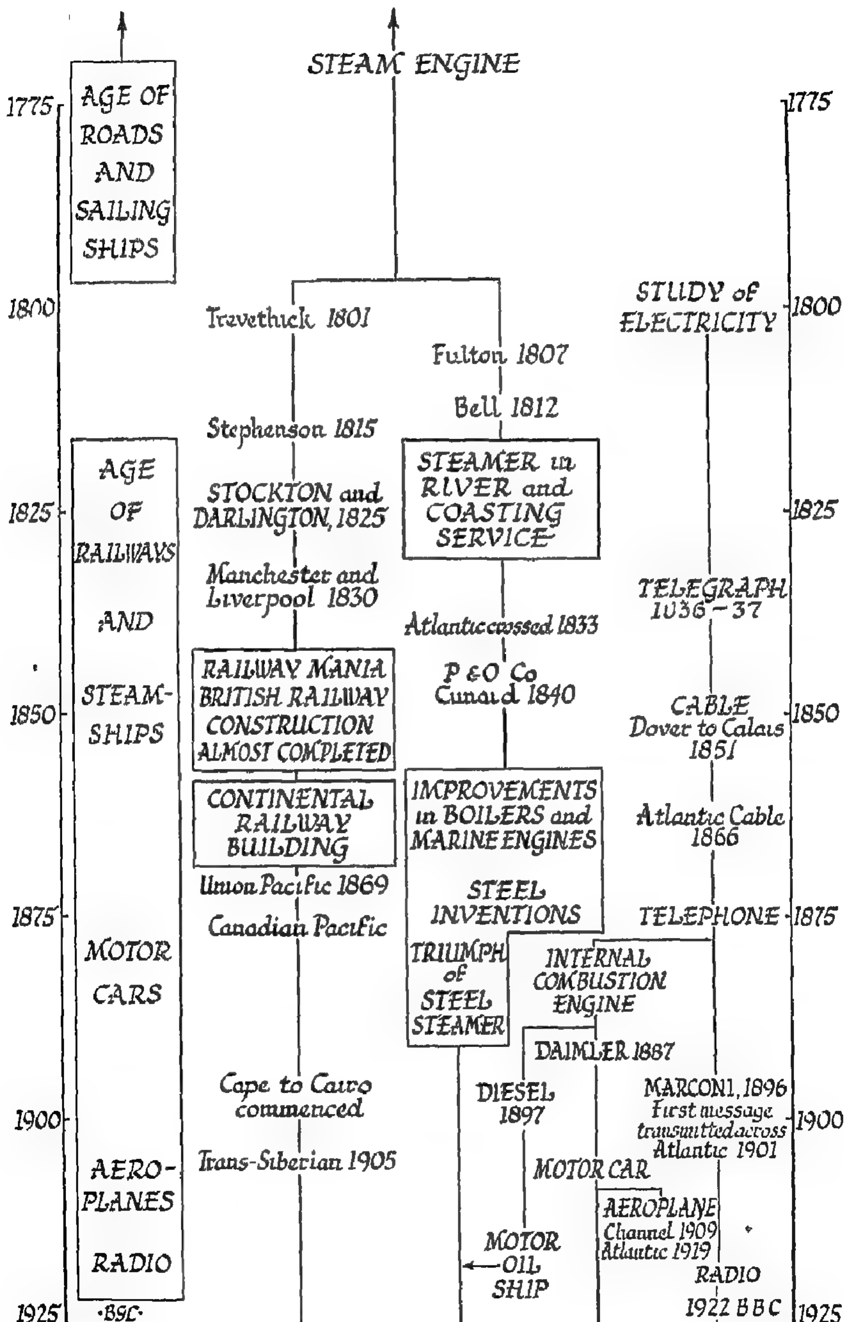
eering, and the motor car industry was able to turn the knowledge thus gained to good account. America led the way in large-scale production and in the use of standardized parts The Ford Motor Company was the first in 1908, by 1915 almost three-quarters of the American cars produced were priced under £200.* Other manufacturers followed the same methods; and before the war of 1914–18, half the American output was in the hands of seven manufacturers. Total annual production had almost touched the half-million mark. In Britain, with its conservatism and its tradition of individualism, the number of firms was still large, and there was little standardization. They produced cars only for the upper and middle classes, and their output of 25,000 cars in 1912 was one-twentieth of that of the U.S.A.

The war itself encouraged American production and checked British In 1920 the output of the former was 2,205,000, and of the latter, 50,000. In the twenties output steadily mounted as standardized methods were adopted. In this development, Morris Motors was the pioneer; but America was still well ahead. In 1928 she was producing about 83 per cent of the world's output of cars. During the period between the two World Wars, the use of the motor car has spread downwards throughout society. Those who do not yet own a private one make occasional use of the taxi, the bus and the char-a-banc. The advent of the motor has stimulated the growth of new industries such as rubber and aluminium production, motor engineering, oil refining and motor transport. It has also brought about a revolution in road-making, and it has changed the aspect of the countryside. Most important of all, it prepared the way for the aeroplane.

Without a thoroughly reliable engine, an air service is impossible. The vast strides made in the improvement of the internal combustion engine by an industry with an expanding market were therefore a necessary precursor of aerial locomotion while still in an experimental stage For a century the observation balloon had played a minor role in warfare During the war of 1914–18, belligerents quickly realized the advantages of a mobile air force. Thus great progress was possible before the prospects of civil air travel began to attract capital. In July 1909 Blériot had flown the Channel. In 1919 Alcock and Brown crossed the Atlantic. Between those dates there had been astonishing constructional advances. When the war was over, all the technique, knowledge and machinery expended on the military use of the plane could be applied to the arts of peace; and civil aviation began its remarkable career. By 1920 there were regular cross-channel services. One result was to make the struggle for supremacy between the great nations more acute. Nationalism asserted itself against a service which knew no bounds of frontier or race.

The great geographical discoveries put Britain in the middle of the world map. Britain was the pivot of international commerce and the sea was her highway. Air transport now threatened to change the centre of gravity of European communications. The most convenient centres of air transport were not seaports, but great inland towns The Germans quickly realized this. Within a decade of the war of 1914–18 it had become a network of airports for the whole of Europe. German air-liners linked up Oslo, Stock-

* Allen, *British Industries*, 1933, Ch VII.



TIME CHART 16 THE CONQUEST OF DISTANCE

holm and Helsinki in the north, with Amsterdam, London and Paris in the west, and with Lisbon, Marseilles, Rome and Athens in the south. Sweden had established services which connected cities of the north with London and Paris without crossing the German frontier. British, French and Poles competed with Germans in both the north and the south, and in east-to-west routes across Europe. Because of her geographical position, Italy was supreme in the Mediterranean; but here, too, Britain and France asserted their right to a belated share in the new lines of communication. Political considerations now dominated the scene, promoting wasteful competition where there should be co-ordination and planning.

Between Europe and the Far East there are two main routes: one the northern route, maintained by Russia across Siberia, and the other, the southern route, to the Eastern Mediterranean, India, the East Indies, Hong Kong, and Australia, where Britain, France and Holland, the colonial powers, follow on each other's heels. The first transatlantic service was established to South America, and on this route German and French companies competed The more unfavourable North Atlantic route was still in the experimental stage at the outbreak of war in 1939. In America, both North and South, air transport was controlled by the United States, and only in one or two routes in South America did French and German lines gain a foothold.

In a sane world, air transport is a service which would come within the scope of international public enterprise. Hitherto controversy over public ownership has taken the municipality or the nation as the unit of administration Recent developments in electricity, in transport, in marketing and in air services show that the most efficient unit of administration may cut across frontiers and cover areas larger than those of any state. Like broadcasting, air transport is a service which knows no national boundaries. Its supra-national character has already been recognized by international conventions Sooner or later international combines, private or public, will replace competition.

NATION SPEAKS TO NATION

More stupendous in their social, political and cultural consequences than all the agencies we have already considered are those inventions which have made possible the instantaneous transmission of news. Within a second, news can now be transmitted across the frontiers of the world, over land and sea and air. At one and the same moment, the whole world gets information of events of importance in any part of the globe. The implications of this human achievement must rank amongst the most far-reaching in the entire history of life on earth, and it has been accomplished in an astonishingly short space of time. Its political and social consequences are incalculable. Every part of the world draws together, bound visibly by the copper wires of the telegraph and the telephone, or linked by the invisible waves of the radio.

All this has come about within scarcely more than a hundred years, and mostly within the last fifty. For centuries men have tried to convey news

over distance by all manner of devices. Flags by day, and lighted beacons by night flashed the signal of danger from an invader from one horizon to another for many centuries, during which ordinary news and messages passed from hand to hand. By 1700 most European countries had, it is true, a State postal service; but the poor roads and climatic difficulties made transport slow, costly and uncertain. The following table shows the time occupied in conveying mails between the provinces and the Capital in 1666–7.*

Between	*Hours*
London and Yarmouth	From 29 to 32
,, ,, Plymouth	,, 50 ,, 58
,, ,, York	,, 39 ,, 42
,, ,, Bristol	,, 25 ,, 30
,, ,, Newcastle	,, 57 ,, 81
,, ,, Edinburgh	,, 73 ,, 103

Improved roads and coaches of the early nineteenth century speeded up the service. According to a Royal Commission of 1830, the average speed of a mail-coach was from eight to nine miles per hour. From London to Liverpool, a distance of 202 miles, took 22 hours 7 minutes, and to Bristol, a distance of 122 miles, 13 hours, 14 minutes. Rates were high, and varied according to weight of package and distance. In 1837 Rowland Hill pointed out that distance made little difference to the cost of sending letters, the main charges being involved in weighing, examining them, and collecting the charge from the recipient. He therefore proposed a standard charge irrespective of distance Thus, in 1840, the Penny Post came into being. Henceforth the cost was collected from the sender by means of stamps. Railways and steamers reduced both time and cost of sending packages from one country to another, except in so far as political frontiers and different systems of charges stood in the way of efficiency. The United States was first to appreciate the advantages of the long-distance post, and proposed an international conference at Paris in 1862. War delayed negotiations; but the International Postal Convention was eventually signed at Berne in 1875. "The creation of the Postal Union," says H. G. Wells, "marks a phase of sanity breaking through the chronic spites of nationalism." The Postal Union is a triumph of planning which takes the whole world as its province. It has survived despite all international conflicts, and stands to-day as a symbol of world unity and as a pointer to the inevitable rationalization of other services. A letter now posted in some obscure village can set out on its journey to the heart of Africa, to South America or to China, without more ado than a trifling charge. By affixing a stamp, it is franked to any part of the world.

At the time when Rowland Hill was planning the British postal service, there had been a move on foot to take advantage of an entirely new technique of communication. In the closing years of the eighteenth century the study of electricity progressed by leaps and bounds. Names of some of the investigators, such as Volta and Ampère, live in terms which are now household

* Quoted J C Hemmeon, *The History of the British Post Office*, 1912, 101

words. Experiments that led to the invention of the telegraph were taking place in many countries when the nineteenth century began. In this, as in so many departments of social life, all nations have been borrowers and all lenders. The telegraph, the telephone, and the radio are international creations, to which British, American, French, Germans and Italians have all contributed. In 1836–7, Gauss and Weber in Germany, and Cooke and Wheatstone in England, made the telegraph a practical proposition. About the same time, Samuel Morse devised the dot and dash system which still bears his name. The railway companies at once appreciated the importance of the telegraph. Between 1837 and 1850 they were almost alone in turning it to everyday use Its advantages for general business were pushed home by Rowland Hill and Wheatstone. The first cable was laid down between Dover and Calais in 1851, and it at once brought the stock exchanges of London and Paris into immediate contact. Thereafter its success was assured. In the same year Reuter's news agency opened in London. A new era of business and market organization, and a new era of politics and international affairs had begun.

The problem of laying cables in ocean beds at a depth of two or three thousand fathoms was not easy to solve. There was much discouraging experimental work to be done before success was final. In 1866 the first effective Atlantic cable was complete. Meantime a line was being carried to India, and was ready to operate four years later. On June 23, 1870, Lord Mayo was able to send a message in a few minutes from his bedroom in Simla to President Grant at Washington by way of a party in London, where the British Indian Telegraph Company were celebrating the completion of their great task * About the same time the Northern Telegraph Company of Copenhagen carried an overland line across Siberia to Vladivostok, whence communication was established with China and Japan. There it met the cable of the Eastern Extension Company coming from India by Singapore. A cable laid in the Java Sea connected Australia with the same system. Numerous cables now stretched across the North Atlantic, and the Brazilian Company connected South America with Lisbon and Europe.

Thus the world was knit together by copper wires stretching overland and underneath the oceans. To-day there are about 300,000 miles of submarine cable By successive scientific advances, their efficiency has increased from 15 letters a minute in 1858 to 2,500 in 1930. The bounds of many markets have been pushed back to embrace the whole world. Along the same lines of communication travel news of ship movements, of crops and prices, of supply and demand. Economic units far transcending political frontiers become possible because of the new speed with which news can flow from one part of the world to another. The tempo of political change intensifies, because consultations over wide areas take place easily and quickly. The new means have revolutionized political as well as economic procedure.

The transmission of human speech offered greater difficulties than transmission of dots and dashes. Many investigators applied themselves to the problem. In 1875 Graham Bell, a Scot domiciled in Canada, first succeeded

* Clapham, ii, 215

in making an apparatus which received the vibrations of the human voice and transmitted them to a similar instrument at the other end of a wire. The telephone was born. When Lord Kelvin saw such an instrument at the Philadelphia Exhibition in 1876, he declared it "the greatest by far of all the marvels of the electric telegraph." In Britain its early exploitation became the perquisite of private companies, but in 1911 the whole telephone service was taken over by the Post Office. The telephone exchanges brought about direct contact between private individuals. The first exchange opened at New Haven, Connecticut, in 1878. In the same year London followed suit. The automatic exchange, which is now eliminating the exchange operator, has since created a new kind of intimacy. Long-distance services soon followed the local telephone. Nation could literally speak to nation. A person in London can now converse with someone in New York, or in Paris, or in Oslo, with ease and comfort. Political frontiers and the physical barriers of mountain or sea are no obstacle.

Still greater triumphs were yet to come. Following a long succession of important advances in pure science, Marconi succeeded in transmitting signals without wires in 1896. He sent signals over a distance of one and a quarter miles on Salisbury Plain, and soon the range increased to fourteen and then to eighty-five miles. Working in close association with the Post Office, Marconi then began experiments in the Bristol Channel. In 1900 his ideas were being tried out by the Navy In December 1901, the first message, a single *S*, was transmitted from Poldhu in Cornwall to Newfoundland a distance of two thousand miles. This experiment demonstrated a fact of tremendous scientific and social importance. Electric waves can spread out over the surface of the globe so that anywhere anyone with the means of detecting them comes within their range. The realization of this possibility aroused great popular interest, and governments were not slow to see some of the more obvious consequences of the new discovery. Shipping invited immediate prospect of application. By March 1908, 72 British ships had wireless installation; four years later the figure was 450, and in March 1914 it was 879.

The next step, the transmission of speech, was accomplished before the end of the war of 1914–18 The British Broadcasting Company began its career in 1922. It was taken over by the State and placed in the hands of a public corporation. Broadcasting swiftly became a powerful instrument of social relations. It provided autocratic governments with a new technique of demagogy. It may yet become one of the greatest educational agencies, co-operating with schools, institutes, and the adult education movement. Radio communication affects people of all nations directly. The listener can tune-in to foreign countries as easily as to his own "Where are political boundaries," asks H. G. Wells, "when man can speak to many men across a thousand miles of space?" Even war no longer closes boundaries between belligerents During the conflict of 1914–18, Germany was completely isolated from the other warring nations In the war just closed, the air resounded with German and English voices talking to, or at, each other across armed frontiers Broadcasting has no frontiers; and broadcasting is not the only force which opposes a parochialism fed on fictitious history and fake biological theories

of race superiority. Electricity has given us wireless eyes, as well as wireless ears. Soon we shall see and hear across the wastes of space.

THE WRITTEN WORD

These electrical aids to transmission of news and views are of yesterday. They have burst on a bewildered humanity as a bolt from the blue, conferring on peoples of all nations and all classes novel and powerful instruments of collaboration and education, or of exacerbation and deception. When the range of travel was narrow, news spread slowly. Many districts remained isolated from the wider life that dwelt in the river valleys and in the young and growing towns. Even a reading public, now so common, is but the creation of the last two or three generations Little more than half a century back, the mass of the people had to rely on the spoken word for news of world events. In earlier centuries, international fairs were the Mecca of story-tellers and gossips, who combined news-hawking with bargaining in the market-place. The merchants of Venice, of Antwerp, or of London were the newsagents, the columnists, and the reporters of medieval Europe. Over the greater part of the world, people got news in this way, if at all.

As early as the fifteenth century there were signs of a change In the preceding centuries the use of paper had spread throughout Europe. From China, it had been introduced into Egypt, Spain, and France by the Arabs in the twelfth century. About 1450 German and Flemish artisans found a new use for the technique of printing crude figures from wood blocks. They started to use type which could turn out many copies of books previously copied laboriously by penmanship. Paper and printing vastly increased the scope of book-distribution, and created a powerful stimulus to literacy throughout western Europe. From Germany the art of printing spread quickly to Italy and to France, then to England. Venice and Paris already had printing presses when William Caxton learned his craft at Cologne. After carrying it on at Bruges, he returned to London, where he started work in 1476 While religious wars checked progress on the Continent, printing made great strides in Elizabethan England. Thereafter followed a period of incubation awaiting the spread of elementary education, improvements in the technique of type-making, and of paper manufacture Until a few generations ago, most people had a Bible, one or two bound books, a monthly magazine, and perhaps a brief news-sheet, from which they got a glimpse of a wider world Paper was still a luxury. Until the nineteenth century all of it came from rags, and this made its manufacture an expensive business The use of wood pulp and esparto grass greatly cheapened it. By so doing it brought the printed word within reach of the multitude, but cheap paper was not enough to nurse a large reading public to manhood.

Cheap printing and general literacy were necessary conditions to fulfil before the printed word could have the wide appeal which is a commonplace of our own generation During the eighteenth century, printing was at all stages a handicraft Power printing was initiated by *The Times* in 1814. On November 29, 1814, it proudly announced in its pages:

"Our journal of this day presents to the public the practical result of the greatest improvement connected with printing since the discovery of the art itself. The reader of this paragraph now holds in his hand one of the many thousand impressions of *The Times* newspaper, which were taken off last night by a mechanical apparatus . . .

"Of the person who made this discovery, we have but little to add . . . It must suffice to say . . that he is a Saxon by birth, that his name is Koenig, and that the invention has been executed under the direction of his friend and countryman, Bauer."

(*Printing in the Twentieth Century*, published by *The Times*, 1930, 15)

Other improvements followed. In 1827 a new press could print from 4,000 to 5,000 copies an hour. In 1848 Applegarth's rotary machine printed 10,000 copies of *The Times*, then of four pages, in a single hour. Mechanization had not yet usurped the work of type-setting. From the beginning of printing until the first quarter of the nineteenth century, printers set all type by hand. About 1828 there were attempts to produce a machine to do this, but fifty years elapsed before it was practicable to operate with one. The type-setting machine employed by *The Times* in 1879 could set up 298 lines, amounting to nearly 17,000 separate types, in an hour At the close of the Victorian era there were also great advances with respect to the size and capacity of printing and of infolding machines; and the telegraph had stimulated a new expectancy by the speed with which it could supply information about what was happening elsewhere. The net result is that the planning and setting up and printing of a daily newspaper is now crammed into a few hours of break-neck production; and each morning sees a flood of over 11,500,000 copies of newspapers poured out from the press in Great Britain

Of all the social agencies by which the printed word is carried into the most remote corners of a country, the newspaper is now the most important. The oldest British newspapers, such as *The Times*, the *Glasgow Herald*, the *Birmingham Post*, and the *Aberdeen Journal*, to name but a few, go back to the eighteenth century. Thereafter, the French Revolution, the Napoleonic War, and the Industrial Revolution created an alertness among the mass of the people, and a demand for news of great political and social events, though technical progress in paper-making and printing was not yet so far advanced as to make possible a wide circulation of printed news. Even so, there were 252 newspapers circulating in Britain in 1815, though for the most part dealing with local affairs. A heavy stamp duty, amounting to fourpence per copy in 1815, still made a daily newspaper too expensive for the ordinary person Radicals fought hard to have the duty repealed, welcoming the press as a powerful weapon for reform, while cheap news-sheets which often evaded the stamp duty alone catered for the working class. Cobbett's *Register* was one of these. It was designed for the pocket of the wage-earner; but it was much more propaganda than news. Newspapers, run mainly by middle-class families, for long catered for the upper and middle classes alone Their main feature was politics; and they were largely filled with reports of Parliamentary debates After the abolition of the taxes on newsprint, advertisements and paper, the price of many newspapers fell to 1d. There were also the monthlies and quarterlies, some of which,

such as the *Gentleman's Magazine* and the *Scots Magazine*, could trace their history back to the eighteenth century. They, too, also circulated almost exclusively among the middle and upper classes.

Meantime the reading public was growing By making elementary schooling compulsory, the Education Act of 1870 gave a new importance to the written word. The Reform Act of 1867 extended the franchise to the urban workers, and that of 1884 to the labouring classes of the countryside. The working class were now politically powerful, and the newspapers of influential individuals and groups fought for their support. Alfred Harmsworth, afterwards Lord Northcliffe, was the first to sense the drift of changing conditions. His entry into journalism in 1885 marks the beginning of a new phase in the history of the Press.

"The key feature of the new journalism," says Ensor (*England, 1870–1914*, 310), "was not sensation but commercialism. It ran its sensations, as it ran everything else, to make money, and measured them solely by the sales they brought."

Following the example of his first employer, George Newnes, founder of the weekly *Tit-Bits*, Harmsworth set out to capture the interest of the new public, whose intellectual attainments were those of the elementary school pupil. In 1888 he started the weekly *Answers to Correspondents*, and in 1896, along with Kennedy Jones, launched the *Daily Mail*. Its circulation rapidly rose from a daily average of 202,000 in the first year of its career, to 543,000 at the end of the third, a figure far in excess of any other newspaper. This new venture in journalism was simply a profit-making enterprise The power of the pen was used less to spread knowledge than to make money, which brings power Since the main source of a newspaper's revenue is advertisement, the paper with the largest circulation not unnaturally attracts the biggest advertisers Papers with smaller circulations quailed before so formidable a competitor with no appreciation of the educative role a Press might play in the new age of a nation-wide reading public. The technique of the *Daily Mail* was different from that of its predecessors and contemporaries. It had an attractive form to catch the attention of those who wished to get news in short, snappy paragraphs and flaming headlines. News was not served raw. It was cooked, overdone, and heavily spiced.

"The old (newspaper)," says Ensor (313), "would print telegrams and reports pretty much as they came in. The function of the sub-editor was to decide in what column and in what type they should appear, if at all, and to provide a few plain headings. But in the new, his function was to rewrite them. They must be condensed, re-worded, re-paragraphed, and each converted according to certain rules into a lively 'story'."

The large capital involved, and the advantages of the joint stock company, soon turned newspaper ownership over to companies. The Harmsworths, the Pearsons and the Hultons soon dominated a large section of the London and provincial Press The new spirit spread throughout the newspaper world Profit and power were the dominating motives. One paper after another succumbed, either ceasing production or passing into the hands of

a combine. Before 1900, newspapers had been for men only. In 1904 women were becoming a force to reckon with in politics, and Harmsworth started the *Daily Mirror* as a woman's journal. It soon established itself as a cheap picture paper. Four years later, Harmsworth (later Lord Northcliffe) achieved his greatest ambition when *The Times* passed under his control. Each successive year saw the tentacles of the great newspaper proprietors extend over the country. Printing and distribution of newspapers had become a highly capitalized industry, and the companies in control counted their capital in millions. A few important newspapers remain entrenched in their own localities. The *Manchester Guardian*, the *Yorkshire Post*, the *Birmingham Daily Post*, the *Liverpool Daily Post*, the *Glasgow Herald* and the *Scotsman* still stand outside the great groups (Ensor, 532–6)

Newspapers have been bandied about like shuttlecocks between members of the same family, or between powerful and antagonistic groups, whose object is power and profit.

"Few newspapers," says Wells, "have any interest in supporting or defending a soundly organized public service, nagging attacks on public services are a worldwide newspaper feature, but every newspaper has an interest in a shabbily conducted, privately owned transport system which is advertising to keep its passengers in a good temper, or in a purveyor of quack medicines or trashy foodstuffs sustaining a legend of merit by a lavish expenditure in display."

THE END OF NATIONALISM

Unification of human interests on a planetary scale by unprecedented expansion of means of communication during the last two or three generations demands new habits of thought about human relations, and brings within the realm of profitable discussion projects which seemed visionary fifty years ago. We have grown up, most of us, to take the nation for granted as a necessary, if not sacrosanct, unit of human association. Even those of us who are familiar with the historical background of the comparatively recent growth of European nationalism have been too apt to dismiss the possibility of world government as a utopian, or at best a remote, goal. This way of thinking is a heritage of the past. A community of human interests transcending the confines of nationality is an accomplished fact.

Is it more effective to "face up to" consequences than merely to "face" them? If we face up to the consequences of an entirely new situation, for which education deeply rooted in medieval traditions and medieval ways of thought furnishes us with no sufficient preparation or knowledge of precedent, one thing about which we have to get clear at the start is the arbitrariness of the nation as a unit of association in the electrical age. The revolutionists of the eighteenth century roundly declared that men had instituted governments to protect their inalienable rights. The truth is that human beings have organized or submitted to various makeshifts under the stress of changing needs, and with no prescience of future opportunities. As their needs and their means of satisfying them have become more complex and more varied, the machinery of administration has also become more complex and varied; but this is not the whole story What is a suitable

geographical unit for co-ordinating needs of one sort, or the means of satisfying them, is not necessarily the same as, does not necessarily include, and is not necessarily a part of, the most suitable geographical unit for co-ordination of other human activities. For purposes of education, language and religion may be the decisive circumstances. For purposes of hydro-electric power supply, propinquity to a watershed is what counts. People with a given language or religion did not settle in a particular locality with the slightest prevision of the possibilities of harnessing water for the production of light or heat. National frontiers have come into being to meet situations that have no relevance to manifold possibilities of human collaboration to-day.

The destructive potentialities of modern scientific warfare have made the alternative to world government of some kind sufficiently grim to stir imaginative people to demand it; but the horror and waste of war has never forced people to merge in larger units of government without the existence of a positive community of interest which a larger unit of government can safeguard On a world scale, such community of interest now exists for the first time, and the problem of equipping it with the instrument of authority is not the problem of getting nations to pull together by pooling their sovereignties for specified purposes. The nation is an anachronism. The problem of good government in an age of potential plenty is the problem of defining units of administration covering areas, large and small, delimited by considerations relevant to the functions they have to discharge

For purposes of aviation, the nation is clearly too small a unit What of broadcasting? Broadcasting links nations such as the United States and Britain, Portugal and Brazil, or Spain and the other South American republics. Contrariwise, nations which have large linguistic minorities may be unnecessarily large units of administration for the exploitation of the ether Here we see the most extreme manifestation of the extent to which social habit lags behind material opportunities created by scientific discovery. The schools of all modern nations hand out instruction in some second language; but there is no co-ordination. To such co-ordination the only obstacle is tradition, which belongs to a time when the possibility of listening to human voices from another continent was fantastic, and the hope of educating a bilingual world with a single second language for common communication was chimerical The possibility is now a reality. By the same token, the hope that educational authorities of different nations may agree to give instruction in one and the same second language everywhere is a sober and businesslike proposition. A world auxiliary language has become indispensable.

CHAPTER XV

COMMERCE AND THE FLAG

THE vast expansion of communications which we have studied in the preceding chapter emphasizes how modern technology is promoting a new sense of world unity, and forces us to take within the scope of our record the relations of the Homeland to other countries. While it is true that the growth of modern communications has increased the scope of friendly collaboration between people of different lands, there is another, and a seamy, side of the picture. From the Great Navigations of the fifteenth century to the present day, improvements of travel and transport have furnished new opportunities for conquest, plunder and exploitation of less fortunate communities as well as the means for neighbourly exchange of goods and cultural amenities. It will be the theme of the next few chapters to examine this aspect of man's increasing mobility.

THE BRITISH EMPIRE

From its beginnings about 350 years ago, the British Empire has grown till to-day its dominion extends over thirteen million square miles, or about a quarter of the land surface of the globe, and its inhabitants number no less than five hundred millions. Within its bounds live folk of every race and religion. There is every type of social, economic and political institution. It is a vast complex organization which defies definition, and it is important to recognize one thing at the outset. It is misleading to speak of the British Commonwealth of Nations and of the British Empire as if they were one and the same thing. The former denotes the self-governing dominions, Canada, Australia, New Zealand and South Africa. The latter includes the dominions as well as the colonies, protectorates and mandated territories, in the main inhabited by native peoples. To talk of the British Commonwealth of Nations when we mean the British Empire is to deceive ourselves and others into believing that all the peoples of the Empire have the right of self-determination. This is tragically untrue. The Dominions are quite free to shape their own course, but the millions of subject races in the Empire have not yet reached the first step in the long climb of self-government.

A few figures suffice to show the importance of keeping the distinction clear. Canada has 11½ (1941) million people, 49·7 per cent of which are of British origin and 30·3 per cent of French. Australia has 7,300,000 people, over 97 per cent of which are of British origin; New Zealand, 1,570,000 people, 91 per cent of which are of British origin; and the Union of South Africa, 9,588,665, of whom 2,003,512 are European, 767,984 "coloured," 219,928 Asiatic and the remainder, about 6,597,241, Bantu Such are the Dominions which make up the British Commonwealth of Nations. Thus the total population of about 30 millions is less than a tenth of that of India, which is now (1946) presented with the opportunity of establishing its complete independence. There are really two Indias: British India (excluding Burma),

under the direct rule of the Government of India, has a population of 290 millions (census 1941); "Indian India," under the rule of the Indian Princes, has a population of 93 millions. The total European population of British India is 306,000, of which about 57,000 are British troops. Excluding India, the Colonial Empire, consisting of crown colonies, protectorates and mandated territories held by the United Kingdom or by the Dominions, has a population of about 58 millions (or almost twice as many as the total population of Canada, Australia, New Zealand and the Union of South Africa) Approximately 80 per cent (by area) of the colonial empire is in the continent of Africa.*

Thus the vital problems of Empire do not relate to the Dominions of Canada, Australia, New Zealand and South Africa, but to India, tropical Africa, Ceylon, and the West Indies, which are inhabited for the most part by native peoples, and a mere handful of whites. We can rightly appreciate them only against their historical background. No intelligent citizen can shirk the responsibilities of an Empire which links the destinies of millions of human beings. The subject is vitally important for all of us. It cannot be easily interpreted or readily dismissed.

INDIA AND THE FAR EAST

India and the Far East have long held a fascination for Europeans. The attempt to discover a new route to their fabulous riches was what prompted Vasco da Gama to face the perils of the Cape. Long before the English had the lust for empire, the Portuguese and the Spaniards had respectively planted their flags in the Far East and on the continent of America. On the last day of 1600 a group of London merchants became incorporated as "the Governor and Company of Merchants of London trading into the East Indies." This was the beginning of the famous East India Company, which in the course of time became a great imperialist as well as a commercial concern. At the outset of its career it had to face competition both from the Portuguese, already entrenched firmly in the East Indies, and of the Dutch, who had sent out trading expeditions some years earlier than the English.

At this time, the goal of most trading companies was the Spice Islands of the East Indies. The East India Company was no exception. Not content with trade in India, where it established stations in 1612, its ships pushed on to the East Indies, the source of spices which were in such great demand in Europe. This venture at once brought it into conflict with the Dutch, who had ousted the Portuguese and now claimed the exclusive right to the trade. The home governments, anxious to avoid conflict, agreed on spheres of influence for their respective companies; but the merchants were not so ready to compose their differences. In 1623 the Dutch seized Pulo Run and Amboyna from the English by force of arms, thus leaving them with only a few unimportant trading stations in the much coveted Spice Islands. Thwarted in its endeavours, the East India Company devoted itself to trade with India. To this day the East Indies have remained largely a preserve of the Dutch nation (Fig 69).

Throughout the seventeenth century the English and the Dutch remained

* See *The British Empire* (Royal Institute of International Affairs), 1938

at daggers drawn. They were rivals in the European and Atlantic trades as well as in the Indian Ocean. It was a mercantile age. By their political influence and predominance in their respective countries, the merchants could represent their interests as the national interests. Thus the English Navigation Act of 1651, which restricted trade between the American Colonies and England to English or colonial ships, was aimed at the Dutch, who were then capturing an increasing share of the new Atlantic trade. The bitterness aroused by this Act, as well as by direct English interference with Dutch shipping, resulted in the first Anglo-Dutch War (1652–4), the first of the economic wars of modern times. It was followed by two more Anglo-Dutch wars; but the two sides had made peace before 1700 in face of the opposition of the French, who were now coming to play an active part in the Far Eastern as well as in the North American trade.

The East India Company directed its main attention to trade. So far there was no question of colonization, since, unlike North America, India was a wealthy country with a highly developed civilization. The company, therefore, made contacts with this eastern civilization through various trading stations, which it was able to establish through the goodwill of native chiefs and of the Mogul Emperor himself. The chief factories were at Surat on the west, and at Madras on the east coast; and there were various minor stations at other places in India, in Java and Sumatra, on the Persian Gulf and on the west coast of Africa. The main imports were spices, silks, cottons, calico, indigo and saltpetre. Though there was still great demand for spices in Europe, the traders soon found that the taste for calicoes and silks tended to increase in England Accordingly, the Company concentrated its main attention on these articles. For long they were faced with opposition from English woollen manufacturers, but the craze for the new Indian products could not be checked. The East India Company thus enjoyed the benefits of an expanding and profitable market. After the Restoration, tea and coffee were imported, and the coffee house soon became a well-recognized institution among the middle class and the well-to-do Tea also became one of the chief commodities handled by the company. Sales in England rose from 54,600 lbs. valued at £45,000 in 1706 to 2,325,000 lbs. valued at £540,000 in 1750.

Since it was unable to find a market in India for the staple manufactures of England, the East India Company came in for a great deal of criticism at home Woollen cloth was obviously not in great demand in India. So bullion was exported to pay for the imports, a state of affairs highly undesirable, according to current views While it exported bullion, the Company tried to show that the favourable terms on which it was able to purchase Indian commodities created a favourable trade balance, so that more bullion returned to England than was sent to India, when these goods were re-exported to Europe. As in 1931, when all the old fallacies about the balance of trade were resurrected with the object of securing protection for British industrial interests from the growth of international capitalism, it was difficult to convince the ordinary man in the street of the truth of this argument. Probably criticism levelled against the East India Company did not cause the directors many sleepless nights For the trade in which they

were engaged was indeed profitable. In 1662–3 the Company paid a dividend of 20 per cent; in 1665, 40 per cent. Though there was a set-back during the Dutch wars, a dividend of 50 per cent was declared in 1682; and the shareholders were credited with the full value of their shares, of which only half had been called up.

THE COLONIZING MOVEMENT

The foundations of the British Empire were laid in the reigns of the first two Stuarts. Starting late in the race, England quickly excelled in empire-building. The causes of its supremacy are many and complex The rise of a commercial middle class and the early decay of feudalism were certainly important. Its merchants had the capital, the organizing ability and the capacity for living laborious days. Unlike the Spaniards who went to America as conquerors, blind to everything save gold and silver, the English went out to settle, to build up a pattern of their own social and cultural life Had the opportunity occurred they would doubtless have been glad to exploit the silver mines of Mexico or Peru, but the eastern seaboard of North America left over for them offered no such easy path to riches. Moreover, England was rapidly coming to the front as a manufacturing nation. It had goods to export to its colonies. More than anything else, this capacity of England to trade with her colonies was what placed her in the first rank of colonizing powers.

The disruption of feudal society and all the religious and political consequences that followed therefrom had profoundly unsettled men's minds This religious, political and economic ferment of the seventeenth century sent thousands of settlers from England across the Atlantic. They were ordinary people anxious to make homes in the lands of their adoption. Such were the pioneers of the Empire, a new type of empire, based on settlement and industry England's isolation from European political conflict gave her a fair field. While the French, numerically greater than the English, were wasting their substance on European war and intrigues, England was able to pursue economic expansion without check. For the defence of her sea routes and her colonies, she could rely on an expanding navy.

The early colonies were founded by joint stock companies, for whom the opportunity of profit-making was the dominant motive. Men with capital rushed to take up stock in these ventures. Their object was not to foster communities that would grow to be self-sufficing. It was to produce commodities for which there was a ready sale in Europe. Since it was the general belief that the colonists would of necessity purchase their manufactured goods in England, the colonizing companies were strongly supported by industrial interests at home. The shipping firms were also enthusiastic, because colonial development meant increased employment for British ships. So the view that the colonies were essential bricks of an imperial economic edifice was thus generally accepted in the two centuries before Waterloo. Accordingly, the home government built up an elaborate code of regulations designed to prevent the colonies from taking part in any economic activity that would conflict with home interests. Such a view of Empire development

still survives in some quarters to-day. Its modern name is Empire Free Trade. In earlier centuries there was more to commend it. Though founded on the interests of home manufacturers and merchants, it was natural to assume that the colonies would exchange their primary products for the manufactured goods of Britain at an early stage in their development. When conflict of interest did arise, the colonists generally ignored the regulations.

While the chief motive for the colonizing movement was economic, there were also others. Some urged colonization on political grounds They saw an overseas empire as a means of strengthening England in face of formidable opposition from Spain. The political motive was allied to another. The establishment of Protestant colonies could provide a check to the spread of Roman Catholicism in America. Indeed, nearly all colonial schemes gave prominence to the missionary value of their work Though this was doubtless a secondary consideration, the prominence given to it shows that it was politic to make as much of it as possible. "A true and sincere declaration of the purpose and ends of plantation begun in Virginia" (1610), recites:

> "The Principall and Maine Ends . . . weare first to preach, and baptize into Christian Religion, and by propagation of that Gospell to recover out of the armes of the Divell, a number of poore and miserable soules, wrapt upp unto death, in almost invincible ignorance; to endeavour the fulfilling and accomplisment of the number of the elect, which shall be gathered from out all corners of the earth, and to add our myte to the treasury of Heaven, that as we pray for the comming of the kingdome of glory, so to expresse in our actions, the same desire if God have pleased to use so weak instruments, to the ripening and consummation thereof."

The Massachusetts Bay Company declared that its chief purpose in colonizing was the spread of the Gospel; and one of its principal supporters claimed that the majority of the settlers went "to transport the gospell to those heathen that never heard thereof." In a Puritan pamphlet of 1620 it was declared that "it hathe been manifested that the most earnest and desirable end of planting colonies, is the propagation of Religion." To be sure, many people emigrated to secure freedom of conscience; but the religious aims of the promoting companies, in contradistinction to those of the emigrants themselves, were clearly subordinate to the economic. The prominence they gave to their missionary object was thus good propaganda. The companies were intent on earning a return on their capital and the colonists on securing a livelihood, but the religious motive brought to the movement the support of many who would not otherwise have been interested It gave, says Beer, "that ethical basis to the work, without which it is impossible for the Anglo-Saxon to exert himself to the fullest degree."

THE PLANTATIONS IN AMERICA

The first permanent colony in America was Virginia In 1609 a group of merchants received a new charter incorporating them as the Treasurer and Company of Adventurers and Planters of the City of London for the first Colony of Virginia The widespread interest in the plan to found a *Nova Britannia* across the seas is shown in the list of shareholders. Besides 56

London and City companies, 659 individuals took up shares. They included 21 peers, 96 knights, 11 doctors and ministers, 53 captains, 28 esquires, 58 gentlemen, 110 merchants and 282 others, among whom were tailors, haberdashers, cutlers, weavers, saddlers, grocers, cordwainers and a host of other craftsmen.

The first settlement was made on the James River. There Jamestown was established. From the very beginning adversity dogged the footsteps of the colonists. Disease, the raids of Indians, and an unhealthy climate decimated their ranks, and instead of the easy riches many had hoped for there was nothing but hardship and unremitting toil. The settlers were a sorry crowd, made up as they were of "unruly gallants, lascivious sons, masters of bad servants and wives of ill husbands," making such "an idle creu" as would "rather starve for hunger than lay their hands to honest labour." Material salvation came to the colonists when it was discovered that tobacco was, of all crops, the one for which climate and the soil were eminently suited. Also it was one that was eminently saleable. Colonists weary with their efforts to raise corn or make glass or iron, deserted these more sober pursuits for tobacco growing. In 1613 an experimental cargo was despatched to England. This was a momentous event, for its success decreed the lines on which Virginia should develop. Fortunes were made easily and quickly as acre after acre was turned over to the new crop and tobacco-laden ships set sail for England (Fig 70).

As the population increased the colonists found it convenient to form subsidiary companies for the sale of tobacco and the purchase of goods in England In the course of time many such companies came into being for specific purposes Most curious of all the subsidiary undertakings was the Joint Stock for transporting 100 maids to be made wives. This "matrimonial speculation," says W. R Scott, "was based on the calculation that it cost £12 for the passage of each of the young women, while the planter, who married one of them, repaid the adventurers for her expenses at the rate of 150 lbs. of tobacco. If the standard rate of 3s per lb. was obtained, this left a gross profit on the transportation of 50 of £505, so that it is little wonder the results gave the adventurers "great contentment" Such "matrimonial speculation," however, has a special interest Much has been said of men as empire-builders, but the part played by women has generally been ignored. The company early appreciated that only emigration of women could create ties which would firmly bind the colonists to their new land. The success of the first consignment encouraged the promoters to send out more shiploads, though doubtless they found difficulty in persuading English maids "of virtuous education, young, handsome and well-recommended" to risk the hazards of the voyage and the greater hazards of matrimony with turbulent and coarse planters.

Between the colonists and the company at home there was perpetual dissension The former were naturally restive under the control of an organization which managed its affairs in London for the benefit of its shareholders. Divergence of interest was too deep to be settled by compromise. In 1619 the colonists established a form of popular government when delegates chosen by all the male adult colonists met at Jamestown. This,

says Mr Davies, was "the first legislative assembly to meet in an English colony and on American soil." Six years later the Virginia Company was dissolved and a Proclamation issued declaring that henceforth Virginia, Bermuda and New England should form part of the Empire and be under the direct rule of the Crown.

Land to the north of Virginia was granted by the Crown to a body called the Council of New England. Within its territory the Pilgrim Fathers established New Plymouth. This body of Nonconformists had left England for Amsterdam in 1608. Within a year they moved to Leyden, where they remained for another eleven years. Then they decided to move again, and first considered a project of emigrating to America. Such an enterprise required capital, but it was readily subscribed by English merchants. When the *Mayflower* set sail in 1620 it had on board 35 passengers from Leyden and 66 from London and Southampton. "Those directly from England," says Davies, "were not separatists and were not inspired by religion so much as by hope of material improvement." At first the settlers suffered cruelly from disease and hardship, but by 1623 their colony was firmly established. As with the Virginia Company, there was disagreement between the colonists and the shareholders in England Eventually the company was wound up.

Another Puritan colony was at Massachusetts Bay Having received a grant from the New England Council, in whose territory they wished to settle, the founders of this colony secured in 1629 a royal charter constituting them the Governor and the Company of the Massachusetts Bay in New England. While many of those financially interested were English merchants, those who emigrated were for the most part religious refugees Since they crossed the Atlantic in search of freedom, they were little disposed to suffer the interference of profit-making shareholders at home. Almost at once the colonists started an agitation to have control shifted from England to America This came about in 1630, when the company was wound up and the charter utilized as the basis of a new constitution. "The great Puritan migration," of which these colonists were the vanguard, resulted in about 20,000 men, women and children leaving England between 1630 and 1643. When the movement came to an end, no less than 60,000 people were said to have left England.

In all the colonies so far mentioned, joint stock companies played a prominent part. Merchants at home provided the capital; and their actions were dictated by the profit motive. The story of Maryland and Pennsylvania is different They owe their inception to the initiative of individuals The former was founded by George Calvert, Lord Baltimore, a Roman Catholic unable to take the oath of allegiance to Virginia whither he had gone, driven from Newfoundland by its inhospitable climate He received a royal grant in 1632. Pennsylvania owes its origin and successful development to William Penn, who received a grant from Charles II in settlement of a Crown debt due to his father. The Restoration period saw two other important additions to the overseas empire on the mainland of America. A proprietary grant gave to Clarendon, Albemarle and Ashley the right to colonize Carolina with a view to production of such goods as silk, fruits and oils, hitherto imported from the Mediterranean. Mostly the settlers came from existing

colonies, such as Barbados, where there was already congestion. The colony grew up in two parts—North Carolina and South Carolina (Fig. 71). The other colony was New York, ceded to England after the Second Dutch War. Its commercial importance was that it lay at the mouth of the Hudson River, main route by which furs came from the Great Lakes. Its immediate significance was that it closed the breach between the northern and southern colonies. England now had a continuous coastline from north to south.

THE WEST INDIES

The tangled story of the West Indies affords an interesting illustration of the conflict of political and economic motives in the age of mercantilism. Though her main activities were concentrated on the mainland, Spain had taken possession of Cuba, Hispaniola, Puerto Rico and Jamaica. In addition, she claimed the exclusive right to navigate the Caribbean Sea. As early as Elizabethan times, England disputed this claim when her sea dogs, intent on the capture of Spanish Plate ships, raided the Spanish settlements. In the seventeenth century, Spanish authority was openly challenged on the ground that occupation was the only valid title to territory. The lure of treasure which prompted most of the early voyages and colonial ventures, including that to Virginia itself, induced buccaneers, courtiers and traders to venture into this Spanish nest. The French and the Dutch were equally eager to gain a foothold in the West Indies.

Motives for English efforts were confused and complicated. Desire to secure riches easily and quickly, as the Spaniards appeared to have done, was a major consideration. Another was political, the hatred of Spain. Most of the English settlements were made by proprietary grants, the overlapping of which led to much confusion The first English settlement was at St. Kitts (or St. Christopher), in 1624. In the next decade or so several other islands were occupied. One of the most important was Barbados, planted by Sir William Courteen, a prominent London merchant. Courteen arranged for transport of emigrants, appointment of governors, supply of equipment and indeed for the general conduct of the colony. By far the most important of the British possessions in the West Indies was Jamaica, seized from the Spanish by Cromwell in 1655. The English were not alone in the West Indies. Besides the Spaniards firmly established, there were the French who had settled numerous islands, including Guadeloupe, the largest of the Leeward Islands. The Dutch were there too, and being more concerned with trade than with colonizing, they were able to play a very active part in the commerce of the region, especially for supply of slaves to Spanish and English colonies The powers lived in a perpetual state of hostility (Fig. 72).

NOVA SCOTIA

Scotland's part in the new commerce and in the colonizing movement was meagre, the main reason for this being the backward state of her industries. English interest in colonial possessions stepped up when her industries had so far developed that larger markets were desirable, if not necessary. During the seventeenth century, expanding English manufactures had

resulted in accumulation of capital, a necessary condition for the successful exploitation of new lands. Till the eighteenth century, Scotland, on the other hand, had few manufacturing industries and little capital. In 1603 the Union of the Crowns brought a Scottish king to London, and it was largely through his influence that the Scots embarked on their first ill-fated colonial venture to found a New Scotland between the English colony of New England and the French settlement of New France in the St. Lawrence. This was in 1621. Sir William Alexander, a Scots nobleman, who promoted the project, then secured the Royal Charter to implement it.

The first settlement started in 1629 at Port Royal. A successful trade in furs started with the Indians, with whom the Scots established good relations; but the French claimed sovereignty over the area. Though their main activities were in the vicinity of the St Lawrence, Charles I, anxious to be on good terms with them, recognized French claims in the Treaty of 1632. Accordingly the Scots had orders to give up their settlement at Port Royal. Thus came to an end what might have been a very promising development. There were two minor efforts to found Scots colonies about this time. One was at East Jersey, where some Scots Quakers, under the governorship of Robert Barclay of Urie, met with considerable success. The other was in South Carolina, where a small Presbyterian colony established itself at Stuart's Town in 1684 It was short lived, being destroyed by a Spanish force.*

THE DARIEN SCHEME

The last independent Scottish venture was the ill-starred Darien Colony. The story of this enterprise has been fully told in *The Company of Scotland*, by Dr. Insh. The beginnings of the scheme go back to the year 1681. A group of Edinburgh merchants then met at Holyrood House to confer with the Committee of Trade. The outcome was an Act by the Scots Parliament, giving a large measure of protection to Scottish industry. A few years later the Glasgow commissioner to the Convention of Royal Burghs brought up colonies as a topic of discussion. "It is the great concern of the Royal Burghs," he said, "to have an interest in foreign plantations." Parliament next took the matter up, and in 1693 passed an "Act for encouraging of forraign trade" Reinforced by the Glasgow merchants, the Edinburgh group of merchants decided to take advantage of the Act, and immediately started to plan an African Company in the hope of securing a market for Scots goods in Africa.

London merchants, excluded from trade with the Far East because of the monopoly of the East India Company, then considered the possibility of using the Scots plan for their own ends. They were not particularly interested in the trade to Africa, but they thought they might break the monopoly of the East India Company by establishing a Scots Company to trade with the Far East. There were thus three distinct forces at work Scottish aspirations to colonize in the background, the ambition of Edinburgh merchants to establish trade with Africa, and the hopes of London merchants to seize

* See Insh, *Scottish Colonial Schemes* (1620–1686), 1922.

an opportunity to break the power of the East India Company. These combined forces co-operated in the movement which led to the founding of the *Company of Scotland trading to Africa and the Indies.* The Scots promoters envisaged a wide national movement for the expansion of commerce and the establishment of a colony. The English, on the other hand, had in view the more practical and limited object of trading with the Far East. At this point William Paterson came forward with a project to found a colony on the Isthmus of Darien The Scots accepted the plan without demur, and the main efforts of the Company of Scotland, which received its charter in 1695, were directed to this end

The flotation of the Company at once aroused fierce opposition from the English chartered companies. After the matter had been ventilated in Parliament at Westminster, the English shareholders withdrew from the scheme. This caused much bitterness and, at the time, much enthusiasm in Scotland. The opposition of the English pointed to the great possibilities of profit to the Scots. In fact, it was now a patriotic task to push forward the scheme with all possible speed. The lists were opened in Edinburgh on February 22, 1696, and immediately there was a great rush for stock. Fletcher of Saltoun says:

"The frenzy of the Scots nation to sign the Solemn League and Covenant never exceeded the rapidity with which they ran to subscribe to the Darien Company. The nobility, the gentry, the merchants, the people, the Royal Burghs without exception of one, and most of the public bodies subscribed Young women threw their little fortunes into the stock, widows sold their jointures to get command of money for the purpose."

Meantime preparations for the voyage went forward apace. Vessels were bought up in Hamburg and in Amsterdam. Large consignments of goods were collected at Edinburgh for use of the emigrants—flour, beef, brandy, butter, cheese, arms, munitions, agricultural implements; and on July 26, 1698, a fleet of four ships set sail from Leith with 1,200 people on board. On October 16th they reached the Gulf of Darien Having found a fine harbour they named it New Edinburgh. No sooner had the adventurers placed their feet on land than disaster overwhelmed them. The site of the proposed colony was itself ill-fated. It was within territory claimed by the Spaniards and it was a fever-infested district. From the start it was doomed. Opposition from the Spaniards was reinforced by opposition from the English, who refused to allow the emigrants to purchase supplies in Jamaica Three separate expeditions set sail from Scotland Before the second arrived the first, driven to desperation by disease, famine and Spanish raids, embarked for home The second and third expeditions met with like disaster.

The great scheme, on which the Scots had staked everything, ended in catastrophe, bringing untold misery and suffering and arousing a bitter hatred towards the English who bore the chief blame for the irreparable disaster. In pursuance of their object of opening up trade with the Far East, several ships had set sail. The *African Merchant*, which made the voyage to Africa, earned a handsome profit, but the *Speedwell* and the *Speedy Return* which sailed to the Far East were lost. Those who were able to view the

whole episode dispassionately realized that the only solution of Scotland's thwarted commercial ambitions was a complete union with England. The Parliaments of England and Scotland united in 1707.

THE COLONISTS

In Elizabethan and Stuart times the view generally held was that England was over-populated. Like Hakluyt, many people urged colonization as a means of relieving congestion, much as people still advocate emigration as a cure for unemployment. Such arguments were supplemented by another. It was argued that planting of colonies would eventually create a market for home manufactures. Thus emigration would equally benefit those who went and those who remained.

Such specious reasoning was not always convincing to the individuals most concerned. Emigration was a vastly speculative business. To the prospective emigrant it offered the expectation of a terrifying journey across the Atlantic, and settlement in a land about which all sorts of alarming and uncanny stories circulated. It is not surprising that people did not rush to exchange the comparative security of life in England for the risks of disease and death attending emigration. To be sure, there were some who were anxious to take the plunge into the unknown—adventurers, men-about-town, debtors and the like who wanted a means of getting rich quickly, for tales of the fabulous wealth of the Spanish colonies spread throughout Europe and presented a pleasant prospect to those whose fortunes were either depleted or exhausted. Still, such adventurers, unaccustomed to labour and to the rigours of colonial life, were scarcely the most desirable type of settlers. The first colonizing companies, therefore, experienced great difficulty in getting the good emigrants. The following is an advertisement issued in 1609 by the Virginia Company:

"Whereas (if God permit) for the better settling of the Colony and Plantation in Virginia, there is a voyage intended thither by many Noblemen, Knights, Merchants and others, to bee furnished and set forth with all convenient speed: And for that so Honourable an action pleasing to God and commodious many waies to this Common Wealth should be furthered and furnished with all means and provisions necessarie for the same, wherein both Honourable and Worshipfull personages doe purpose and prepare to goe thither in their owne persons: This is therefore to intimate and give notice to al Artificers, Smiths, Carpenters, Coopers, Ship Wrights, Turners, Planters, Vineares, Fowlers, Fishermen, Mettell men of all sorts, Brickmakers, Bricklayers, Plow-men, Weavers, Shoe-makers, Sawyers, Spinsters and all other labouring men and women, that are willing to goe to the said Plantation to inhabitite there, that if they repayre into Phillpot Lane, to the House of Sir Thomas Smith, Treasurer for the said Colony, their names shall be Registered, and their persons shall be esteemed at a single share, which is Twelve pound ten shillings, and they shall be admitted to goe as Adventurers in the said Voyage to Virginia, where they shall have houses to dwell in, with Gardens and Orchards, and also foode and clothing at the common charge of the Joynt Stock, they shall have their divident also in all goods and Merchandizes, arising thence by their labours, and likewise their Divident in Lands to them and to their Heyres for ever."

Such attempts to secure settlers met with little success, and in the early days of the colony repeated complaints were made that the emigrants were mostly undesirables Between 1620 and 1660 conditions at home became more favourable to emigration. Periodic spells of depression and unemployment, religious persecution and the political unsettlement of the times made many people look with longing to a continent which could offer them fresh opportunities and freedom of conscience. Civic authorities urged that the colonies presented a promising solution of the problem of poverty, and boatloads of paupers were repeatedly shipped across the Atlantic. In 1618 London despatched 100 children. In the following year the Virginia Company petitioned the magistrates for a further consignment.

"And forasmuch as wee have now resolved to send this next Springe very large supplies for the strength and encreasinge of the Collonny, styled by the name of the London Collony, Ande finde that the sendinge of those Children to be apprentises hath been very grateful to the people We pray yo[r] Lo[p] and the rest in pursuite of yo[r] former so pious Accons to renew yo[r] like favours and furnish vs againe w[th] one hundreth more for the next springe. Our desire is that wee, may have them of Twelve years olde & vpward w[th] allowance of Three pound a peec for their Transportation and fforty shillings a peec for their apparrell as was formerly granted. They shall be apprentizes the boyes till they come to 21 years of Age the Girles till the like age or till they be marryed and afterwards they shalbe placed as Tennants uppon the publique land w[th] best Condicons wher they shall have houses w[th] Stocke of Corne & Cattle to begin w[th], and afterwards the moytie of all encrease & profit whatsoever. And soe wee leave this mocon to yo[r] honourable and graue consideracon."

The Pilgrim Fathers had started a great wave of emigration of those who sought a land where freedom of conscience was permitted; but economic motives were ever present, and it was the combination of these two that accounts for the steady flow of colonists down to about the Restoration. After the Restoration the Poor Law empowered Justices of the Peace to transport "disorderly persons and sturdy beggars" to the colonies for seven years. Their numbers were swelled by the transportation of criminals and political prisoners. Those who were responsible for the colonies were fully alive to the need for getting a different type of settler. Among others, the promoters of Massachusetts Bay and of the other New England colonies had actively encouraged the emigration of puritans and nonconformists; every effort was made to secure craftsmen and agricultural workers in the proprietary colonies, such as Maryland and Pennsylvania. Sometimes a squire who emigrated would take many of his tenants with him. Before they left, the latter would usually sign an undertaking promising to remain with their leader for a stipulated number of years. This was doubtless a prudent method of security for those who would not undertake the risks and hazards of emigration on their own, but it opened the way to grave abuse Economic necessity of the victims and demand of the colonies for labour gave unscrupulous persons the opportunity of seducing would-be emigrants to sign an indenture of which the advantages were largely unilateral.

This traffic of indentured apprentices and servants assumed considerable proportions in the late seventeenth and eighteenth centuries, and merchants, brokers, shipmasters and many others engaged in it. No doubt many people went out willingly, prepared to bind themselves for a term of years in return for transport; and thereafter were perfectly free to pursue their own interests; but the majority of servants were cajoled into signing undertakings which made their freedom when they did arrive in America little greater than that of slaves. The following is a typical form of indenture (C M. MacInnes, *An Introduction to the Economic History of the British Empire*, 1935, 30).

"This Indenture made the 31 of March in the year of our Lord 1680 between Richard Civiter of the one part, and John Wilmore of London Merchant of the other part; Witnesseth, That the Said Richard Civiter doth hereby promise, covenant and grant to and with the said John Wilmore, his Executors and Assigns from the Day of the date hereof until his first and next Arrival in Jamaica in parts beyond the Seas, and after for and during the Term of Nine Years, to serve in such Service and Imployment as he the said John Wilmore or his Assigns shall imploy him, according to the Custom of the Country: In the like kind, in consideration whereof the said John Wilmore doth hereby covenant and grant to and with the said Richard Civiter, to pay for his Passage, and to find and allow him Meat, Drink, Apparel and Lodging, with other Necessaries, during the said Term and to pay unto him the said Richard Civiter, as by Custom of the country he ought, and in such case is used, In witness whereof the Parties above-mentioned to these Indentures have interchangeably set their hands and Seals, the Day and year first above written."

Especially after the Restoration, "spiriting" of children and adults to the plantations became a crying scandal All sorts of deceptions were practised by those who made money out of this trade in human beings, and though the State tried to check the practice, such meagre punishments as were inflicted on those found guilty of kidnapping do not sustain the claim that the law did much to stamp it out. Mr. MacInnes relates a tradition that local magistrates in Bristol, being interested in the plantations, would impose sentences of transportation on delinquents, in the hope of providing labour for their own estates. Kidnapping and spiriting, therefore, continued up to the American Revolution; and there were few seaports which did not take part in the nefarious traffic. Peter Williamson, born near Aboyne in Aberdeenshire, has left an account* of how he visited, as a boy, the harbour at Aberdeen, where he was persuaded by sailors to go aboard a ship There, with other children, he remained a prisoner till a sufficient number had been collected The ship then set sail for America, where he was sold to a colonist in Philadelphia. On arrival in America "servants" were put up for sale, as disclosed by the following advertisement which appeared in the *Philadelphia Gazette*, July 26, 1761.

"Just arrived from Cork, in the Snow, *Penguin*, Robert Morris, Master, a parcel of likely Servants, used to country work, as also tradesmen of various sorts . . whose times are to be disposed of on board the said Snow lying off

* *The Life and Curious Adventures of Peter Williamson, who was carried off from Aberdeen and sold as a Slave*, 1801.

against Market-street wharf or Edward Bridges at his house (commonly called the Scales) for ready money or the usual credit."

The *Quebec Gazette* of November 24, 1776, announced

"TO BE SOLD

An indented servant woman, who has three years and eight months to serve"

Such luckless emigrants had to undergo all sorts of indignities when brought up to be examined by dealers. Usually they were bound to planters for a term of four years The short period of service meant that they were regarded as less profitable than convicts bound for seven or more years or than negroes who were out and out slaves and the chief source of labour. Accordingly their treatment by the masters was worse. The negroes, "being a property for life," says a colonial surveyor in his letters from America 1769–77,

"are therefore almost in every instance under more comfortable circumstances than the miserable European, over whom the inflexible planter exercises an inflexible severity. They are strained to the uttermost to perform their allotted labour, and from a pre-possession in many cases too justly founded, they are supposed to be receiving only the just reward . . . for repeated offences There are doubtless many exceptions, yet generally speaking they groan beneath a worse than Egyptian bondage."

THE TRADE OF THE NORTHERN COLONIES

The fishing industry was the first, and for long the most important, branch of England's trade with North America. It attracted support both on economic and political grounds. The fishermen naturally regarded it as a profitable business, but the State supported it because the industry itself was a training-ground for seamen Some of the fish was brought home, but most shipped direct to Mediterranean countries to purchase produce which in turn was shipped to England The fishing industry, therefore, involved a three-corner trade and was regarded as specially valuable by the mercantilists, because it did not involve any export of bullion. The English fishermen were not the only people who exploited the Newfoundland waters. There were the French and the Dutch, with whom there was great rivalry and often open conflict But gradually the English wrested from the French the major share of the trade In 1713, the French lost Acadia, henceforth known as Nova Scotia, by the Treaty of Utrecht, as also Newfoundland. Thereafter their activities were limited to Cape Breton and the Gulf of St. Lawrence The Treaty of Paris (1763), which ended the Seven Years' War, however, gave Britain entire possession of the Gulf fisheries. The northern colonies, such as New England and Pennsylvania, were not looked on with favour by the home country. Their natural endowments were too much like those of England herself "New England," said Sir Josiah Child in 1690,

"is the most prejudicial Plantation to this Kingdom . . . all our American Plantations, except New England, produce Commodities of different Nature from those of this Kingdom"

However, it was felt that if England withdrew, such colonies would be immediately occupied by the French New England, meanwhile, developed on quite different lines from the southern colonies. From the Red Indians her people learned the growing of Indian corn and the felling of trees. On the basis of her abundant supplies of timber she built up an important shipbuilding industry, which came to be of sufficient importance to arouse the opposition of the Thames shipbuilders, who petitioned Parliament against it. Some of her ships were exported to England and took part in the Atlantic trade. Others were retained for coasting service and inter-colonial trade, and many sailed to Africa to take part in the slave trade. Out of the 7,694 vessels which made up the British mercantile marine, just before the American Revolution, MacInnes tells us that no less than 2,342 were built in the colonies, and of these most were from New England yards. In the next century New England led the way in building the famous opium and tea clippers which sailed the China Seas.

The northern colonies also exported timber, naval stores, fish oil, furs and skins, but this trade was never important enough to win the approval of Englishmen. Though most of their manufactured goods were imported from England and Scotland, their chief economic ties were with the southern colonies which they supplied with cereals, fish, and meat at a lower price than they could be obtained from England. This trade, however, could not arouse any enthusiasm among merchants at home. When the New Englanders extended their trade to the French sugar islands of Martinique and Guadeloupe in the West Indies there was an outcry in England, fanned by the sugar interests, who were being undercut by the French in the European market. This trade with the French islands was what might be expected, since the French continental settlements in Canada and on the Mississippi were unable to supply them with food. The New Englanders seized the opportunity to extend their trade. In exchange for food they received molasses from the French. This led to the establishment of distilling in the colony. The rum so manufactured was sold to the Indians for furs, while large quantities were exported to Africa to be bartered for slaves which New England ships brought back to the West Indies. The northern shippers and merchants were paid by planters with bills of exchange drawn on London against the export of sugar and tobacco They were thus able to purchase manufactured goods in Britain, and so settle the balance of indebtedness.

THE TOBACCO TRADE

The southern colonies, such as Maryland, Virginia, the Carolinas and the West Indies, were regarded as ideal, because they provided Britain with commodities which would otherwise have to be purchased from foreigners At an early stage in the history of the Virginia Company, it was realized that the colony was eminently suitable for tobacco growing; but much prejudice had to be overcome before the industry began to flourish. At home there was considerable opposition to it, and James I himself did his utmost to discourage the industry. Even the leading members of the

Company were not anxious to develop an industry which was the subject of so much popular odium. Indeed, for a number of years they tried to establish manufactures Skilled metal workers were sent out and several charcoal furnaces erected. They also planned to establish a silk industry, and experts were brought from France. At a Court meeting in July 1620 a list of "Provisions necessarie for ye settinge vpp of y^e Staple Commodities" was prepared. It included "a great store of Silkworme seed . . . and men skilful in the orderinge of the Wormes"; olive plants from Marseilles; "men skillfull in the plantinge and dressing of Vynes outt off fraunce and from the Rhene;" hemp and flax, and "men skillfull in those trades from the Easterne parts."

The natural endowments of the southern colonies, no less than the methods adopted for their economic exploitation, were different from those of their northern neighbours. With no immediately valuable endowments, the northern ones were left by the big commercial interests to the colonists who settled there in relatively small holdings to cultivate the soil. Though land was plentiful, reclamation from forest and waste was a laborious job. Being directly concerned with the production of food for their own use they naturally husbanded their resources. In the southern colonies, where soil and climate favoured tobacco and sugar growing, both crops required large capital outlays on the plantations themselves, on tobacco-dressing and on sugar mills. The man with money turned planter. Compared with holdings in New England, the plantations were large. Cultivation of 500 or 600 acres, which was fairly common, necessitated a vast labour supply, because the growing crop required constant weeding. At first indentured servants were the only source; but slave labour was employed at an early date. White people soon made up a mere fraction of the population The vast mass of the people was of African origin Ruthless methods of exploiting labour and land laid up troubles for posterity in plenty. The riches of Virginian and West Indian planters in the eighteenth century were ill-gotten gains, which brought moral and spiritual degradation both to the Africans, brutally torn from their country, and to the planters who fought to maintain such conditions (Fig 73).

In the first half of the seventeenth century the Crown hesitated between suppressing the tobacco trade altogether and using it to replenish the national exchequer. After the Restoration the Virginia planters got every encouragement. In their interests tobacco-growing was suppressed in England They now had a free hand to develop their plantations with the aid of slaves and the dregs of the population from the homeland. Importation of foreign tobacco was prohibited, and the Navigation Act of 1660 classed tobacco as an "enumerated" commodity. This meant that it had to be imported to England before being sent to any European country. Behind all these restrictions were many powerful economic interests The Virginian and other colonial planters naturally favoured a protected market. The shipping interests wanted trade confined to English ships. Home merchants of London and Bristol realized that canalizing all the tobacco trade through England would swell their profits. A combination of such powerful commercial interests had all the appearance of national self-regard.

Within England there was rivalry between the various ports that shared

in the trade. At first all tobacco came to London. Despite governmental regulations which aimed at the maintenance of this monopoly, competition of Bristol and Liverpool increased rapidly On July 19 and 20, 1666, of twenty-three ships from Virginia and Barbados arriving at Bristol, no less than nineteen were laden with tobacco only. Scotland was excluded from the colonial trade by the Navigation Acts, since each country retained its own parliament and its own fiscal system after the Union of 1603, but the fact that an Act was on the Statute Book was no guarantee that it would or could be enforced. Shortly after the Restoration, Glasgow merchants began to take part in the tobacco trade with Virginia. This event indicates a shift of the economic centre of Scotland from the East to the West, where it still remains. As yet the River Clyde was shallow and quite unsuited for navigation It is significant that the magistrates of Glasgow decided, in 1662, to create a port for the city—Port Glasgow. In 1695 there were twenty-four Scottish ships trading with the American colonies, but after the Union of Parliaments in 1707, which extended the benefits of the Navigation Acts to Scotland, the trade increased rapidly. It passed largely into the hands of Glasgow merchants.

This entry of Glasgow into the tobacco trade aroused the hostility of the English ports which had hitherto monopolized it Bristol petitioned the Government, and in 1721, according to Gibson (*History of Glasgow*, 1777, 207), "a most terrible confederacy was entered into by almost all the tobacco-merchants in South Britain, against the trade of Glasgow." Nevertheless, the Clyde trade expanded rapidly, and just before the American War of Independence tobacco was by far the largest single item in Scotland's foreign trade. The tobacco trade brought great profit to the planters themselves; and the wealth of the Glasgow "tobacco lords" became proverbial. Many of them purchased estates at home, and entered the ranks of "country gentlemen " The capital they accumulated helped to finance Scotland's industrial revolution. Nor were they the only people who benefited from the colonial trade. Home manufacturers too praised tobacco, because the plantations provided a market for their manufactured goods. As an English writer of the eighteenth century put it,

"the Tobacco plantations take from England their cloathing, household goods, iron manufactures of all sorts, saddles, bridles, brass, copper, wares: and notwithstanding their dwelling among the woods, they take their very turners wares, and almost everything else that may be called the manufacture of England; so that indeed it is a very great number of people that are employed to provide a sufficient supply of goods for them" (quoted MacInnes, 66)

THE SUGAR TRADE

In the seventeenth and eighteenth centuries the West Indies were the cockpit of political and economic forces. We have already noticed the conflict of interest between Spain, England, France and Holland, and how the capture of Jamaica from the Dutch firmly established England herself in the Caribbean Sea. The conflict did not end there. Down to the end of the Seven Years' War in 1763 the four countries were constantly at logger-

heads. At the root of their rivalry was trade, and especially the sugar trade After the Restoration, English planters in the West Indies switched over from tobacco to sugar, and they were supported wholeheartedly by Parliament in the development of the new trade. The West Indies thus came to be regarded as the most desirable of colonies. They supplied England with a commodity—sugar—which had hitherto been obtained from the Portuguese. They took from England manufactured goods and gave employment to English ships. They employed slaves, which meant that the islands could not establish manufacturing industries likely to compete with those of the home country. Moreover, the West Indies were favourably situated for the import of slaves from Africa and for supplying them to English and Spanish colonies on the mainland

Sugar plantations usually covered about 600 acres, but not all of them devoted to sugar. The labour employed required a considerable share of it for housing and for growing food crops Cane planting was laborious work, and during the fifteen months before maturity the crop had to be weeded continuously This was done by hand, as is still the custom. The other operations also involved much labour—the cutting of the cane, the removal of the foliage, the cartage of the cane to the grinding mills where it was crushed and the sugar extracted. A plantation, therefore, consisted of the land actually under cultivation, as well as sugar mills, piers, settlements where the slaves and other employees lived, together with land under food crops. Sometimes the distilling of rum was also carried on All such work absorbed a large amount of hand labour, and it was for this reason that slaves were so extensively employed. As on the tobacco plantations, both land and labour were exploited shamefully. The wasteful use of labour which is a legacy of the old slave days persists to-day. For instance, Trinidad has about 40,000 workers on less than 35,000 acres. St. Lucia has 6,900 on 4,000 acres.

Sugar planters exerted a powerful influence on British foreign policy A very striking illustration of this was the war against Spain in 1739, according to Pares (*War and Trade in the West Indies*, 1936, 126), "unmistakably a war for trade." Since the Treaty of Utrecht in 1713 the English sugar colonies had suffered depression, partly because of competition from the French and the Dutch, whose lower costs helped them to capture rapidly European markets. To compensate themselves the English sugar planters tried to maintain high prices in the home market They used their influence to prevent England adding to her colonial possessions in the West Indies, because this would lead to an increase of the output of sugar. The Molasses Act of 1733 had a twofold object. It would compel the northern colonists to buy more rum and molasses from the English sugar colonies, thus taking off some of their supplies of sugar and helping to maintain high prices. By imposing heavy duties on the importation of foreign molasses into the northern colonies it would also check export of food to the French Islands, and so help to increase French costs of production. In the war of 1739 the English planters, many of whom were themselves merchants, were against further colonization, but they did not scruple to use the power of the State to strengthen and increase illicit

trade with the Spanish colonies Their interests, says Pares, "became, for the time being, the only national interests where trade with Spanish America was concerned." The British Navy supported the merchants in their trade drive In short, British imperialism in the West Indies during the eighteenth century was much like British imperialism in Africa during the following century. The bellicose patriotism of the planters was *en rapport* with their own economic interests.

CANADA

Until the railway age the Empire consisted of strips of coastline in North America, various islands in the West Indies, and trading posts in India. The political and economic consolidation of Canada was a by-product of its railway system. So there was little colonization until the nineteenth century The dominant circumstances in Canada's economic history have been her geographical and climatic conditions. The St. Lawrence, gateway of the East, gives access to the Great Lakes In the early trading days when canoes were used, rapids did not present insuperable obstacles as to the larger ships of a later generation. A river and lake system made it possible to penetrate two thousand miles into the interior of the country First of all, the French, like the English, had been attracted to Canada by the fisheries. Early in the seventeenth century emigrants from the Loire settled on the Bay of Fundy in Nova Scotia, and the Company of Rouen was floated to establish a settlement in Quebec. Both groups found a very profitable outlet for their activities in the fur trade. Pushing down the St. Lawrence to Montreal they came to Lake Nipissing by way of the Ottawa River, and then on to the Great Lakes, where they bartered brandy for the furs of the Indians. The French were intent on racial expansion; and their priests were as active as their traders. In the search for furs and for new spheres of influence they went far afield, blazing many trails across lands unknown to white men. There were two sources of weakness in this policy, and they were to be their undoing before the issue with Britain was finally settled on the Heights of Abraham Every activity of the colony was closely regulated by the Government, which, after the failure of successive companies, constituted Quebec as a Royal Province under the direction of a Governor. The new colony was to be a New France with the same laws, the same land tenure, and the same financial system as the mother country. "French colonization," says Lucas (*Introduction to Lord Durham's Report*, i, 24),

"was born of the State, it was reared by the State, it was controlled by the State. Its essence was feudalism, imported from the old world to the new, which was not, however, as in the old world, a growth, but the creation of the Crown. In New France the authority of the Crown and of the Church was absolute" (Fig. 74).

A medieval pattern of economic and social life was ill-suited to a new country in this period of intense commercial rivalry, and had it been well-adapted, the problem of finding sufficient food for colonists and traders was never satisfactorily settled Agriculture was handicapped by the natural

difficulties of the colony, by dissension, by disease and by famine In times of dearth, food had to be imported from France. In times of plenty, lack of markets and unsatisfactory trading arrangements with the West Indies resulted in glut. "The demands of the fur trade," says Professor Innis, "placed severe limitations on agricultural development and contributed directly to the lack of self-sufficiency of the colony and to its loss to France" (Figs. 75 and 76).

Economically and geographically there is no natural barrier between Canada and the United States. In the old colonial days an alternative route from the Great Lakes was down the Mohawk River and the Hudson valley to New Amsterdam in the Dutch colony of New Holland. The commercial importance of this other gateway to Canada was early appreciated. Both French and English were rivals of the Dutch. After the Second Anglo-Dutch War New Holland, despite, protests of the French Canadians, passed into the hands of the English and New Amsterdam became New York The breach between the northern and the southern colonies was thus closed, but the chief importance of the new acquisition was that it gave access to the Great Lakes and to the fur-trading Indians.

Still another approach to Canada was by the Hudson Bay. The possibilities of this route had been realized by Martin Frobisher in Elizabethan days, but nothing effective was done until 1670, when the Hudson's Bay Company was founded. French fur traders had penetrated to the Great Lakes before this time. Two of these traders turned northwards and reached Hudson Bay. The trip proved highly profitable, and they returned to Quebec with large quantities of furs. The French authorities, however, frowned on this independent action and refused to aid them in the exploitation of this new area. The adventurers, therefore, turned to English merchants, actively engaged in the fur trade since the capture of New Holland. A sea trip to Hudson Bay convinced them that the reports of the French traders were well founded Accordingly, the Hudson's Bay Company was floated in 1670 The inability of the French to develop the fur trade, the mainstay of Canada's trade until the days of the railway, was what opened the door to English traders and eventually assured their supremacy.

In November 1671 a placard displayed at Garraway's Coffee-House, London, makes the following announcement.

"On the fifth of December ensuing, There Will Be Sold, in the Greate Hall of this Place, 3000 weight of Beaver Skins, comprised in thirty lotts, belonging to the Honourable, the Governour and Company of Merchant-Adventurers Trading into Hudson's Bay" (Fig. 77).

The policy of the Company was to establish forts or trading stations along the shores of Hudson Bay, and in 1682 they had a string of them, the chief ones being Forts Rupert, Albany, Severn, York, Nelson and Churchill. Thither the natives came with their furs, and, as in all cases of trade with primitive peoples, the white man found it easy to barter useless trinkets for valuable products. In one of the News-letters of 1671, quoted by Beckles Willson (*The Great Company*, 1900, i, 65), we read

"Hither came Mr Portman, to whom, report says, is entrusted the purchase of beads and ribbons for the American savages by the new Adventurers, and who is charged with being in readiness to bargain for sackfuls of child's trinkets as well as many outlandish things, which are proper for barter"

Other goods bartered for furs were traps, guns, powder, knives, hatchets and such-like weapons likely to aid the Indians in killing game and thus furnishing the Company with supplies of furs. A disastrous consequence was that the Indians could turn their weapons on the English traders when the need arose. A conflict between English and French traders was inevitable. The former, spreading out from the Hudson Bay, were now attempting to trade in a region which the latter had come to by way of the St. Lawrence. At times there was open warfare, and Indian tribes were caught up in the fierce commercial rivalry. In 1682 French ships appeared in Hudson Bay and captured Fort Nelson It was returned through the influence of Louis XIV, who wished to be at peace with Charles II, but intermittent strife continued A few years later a French force travelled overland and captured all but one of the Company's forts "It will appear," said the Company in a memorial to William III in 1689,

"by a true and exact estimate, that the French took from the Company, in full peace between 1682 and 1688, seven ships with their cargoes, and six forts and factories, from which they carried away great stores of goods laid up for trading with the Indians The whole amounts to £38,332 15s."

By this time the French wars had started in North America. Furs and fish being the main products of Canada, Hudson Bay and Newfoundland were the chief theatres of conflict. In the former, rival traders struggled wholly for monopoly of the fur trade In the latter the issue was not so clear cut The English had not favoured colonization of Newfoundland, because there was the fear that the home fishing interests would suffer. There was likewise the fear that the French would take possession if the English did not When England finally decided to regard Newfoundland as a colony, the stage was therefore set for a conflict with French interests For many years the issue hung in the balance. Eventually, as we have seen, the Treaty of Utrecht (1713) secured for Britain the upper hand. The Hudson's Bay Company was reinstated in its territory. Acadia and Newfoundland were recognized as British. Only minor fishing rights were reserved for the French on the northern shores of the island.

THE FINAL STRUGGLE BETWEEN BRITAIN AND FRANCE

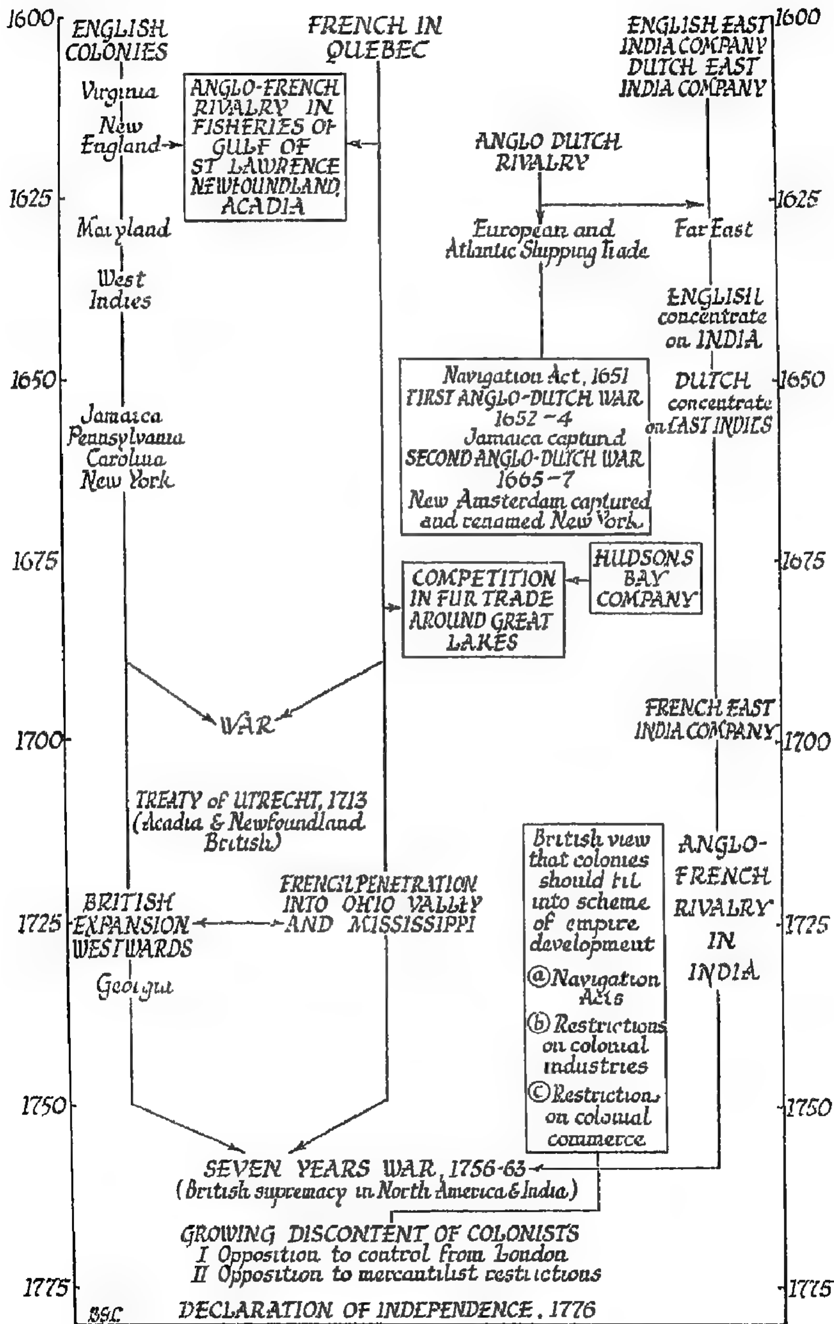
Struggle for trade was the dominant issue in North America and in India. In North America, the English had planted a series of colonies along the eastern seaboard from the coast of Maine to Florida. These colonies were mainly engaged in the production of tobacco, sugar, rice, maize, distilling and shipbuilding In New England and in the Gulf of the St. Lawrence, fishing was of primary importance. The influence of the British steadily grew in Nova Scotia, Newfoundland, Cape Breton and Prince Edward Islands

to which many Highlanders emigrated after the '45 Rising. Confirmed in its territory by the Treaty of Utrecht, the Hudson's Bay Company was steadily expanding its sphere of influence in the north to the Great Lakes and to west. Its wealth was in the fur trade, for which the French were dangerous rivals. They had long since established trading posts around the Great Lakes. They, too, were penetrating westwards as well as southwards, where the Ohio River pointed the way to the Mississippi and to the Gulf of Mexico. Both sides were eager to peg out claims on a vast continent. To people at home the issue was not clear-cut, for those who benefited from imperialism, like the Hudson's Bay Company and the tobacco and sugar planters, cloaked their motives with others which appealed to sentiment and patriotism, but the struggle was essentially economic, and the native tribes were used as pawns in the most reckless fashion.

Exploitation of resources, both material and human, for the profit of those who adventure their capital is the real end of imperialism. To this end they use the power of the State; and the man in the street is made to feel a glow of pride in the furtherance of their aims by self-identification in the acquisition of lands added to the Empire.

So far the rivalry had mainly involved the Gulf of St. Lawrence fishing industry and the Canadian fur trade In 1717 a clash between the English colonists and the French came nearer when the French established New Orleans in the Gulf of Mexico as the centre of a new colony of Louisiana. From the St Lawrence, by way of the Great Lakes, the Ohio, and the Mississippi to the Gulf of Mexico, a chain of fortified trading posts now challenged British advance westwards from the seaboard colonies. Economic advantage was on the British side Before the Seven Years' War, the issue was being decided in their favour. Higher efficiency of home industry enabled the British to trade in cheap manufactured goods Their more advanced commercial organization gave them an advantage over the French, with industry at home backward and American trade cramped by State regulation. Besides, two million British colonists far outnumbered the French. Isolated from the political struggles of Europe, Britain was able to pursue the path of peace and economic advancement. France wasted her substance in alliances and wars.

Trusting to military rather than to economic measures, the French built a fort at Louisburg on Cape Breton Island, hoping thereby to dominate the entrance to the St. Lawrence In 1753 they drove the British traders out of the Ohio Valley and erected Fort Duquesne. In the following year a representative conference of the English colonies took place at Albany in New York A proposal to take joint action against the French was turned down by the individual Assemblies Intermittent fighting came to a head in 1756 at the outbreak of the Seven Years' War At first the French gained military successes, but the final advantage lay with the British. The main theatres of conflict were Nova Scotia and the Ohio Valley, both key positions to the interior of the continent. Louisburg was attacked and taken by the British. The way to Quebec was now open Fort Duquesne was captured and renamed Pittsburg The Treaty of Paris (1763), which ended the War, left the British supreme in North America



TIME CHART 17: TRADE RIVALRY AND EMPIRE BUILDING

The same two commercial powers were face to face in India. In the early eighteenth century the French East India Company, inferior to the English in experience and commercial importance, showed great energy by establishing new trading stations. The crumbling of Mogul Power, which brought chaos to India, offered new opportunities of political domination to the European Powers. Both companies then had factories dotted along the coastline where they carried on trade through the goodwill of the native peoples. The chief factories of the English were at Bombay, Madras and Calcutta; those of the French were at Pondicherry, to the south of Madras, and at Chandernagore, to the north of Calcutta. On the disruption of the Mogul Empire, these trading stations became armed camps, to be used as jumping-off grounds in the dismemberment of India. French success in the Carnatic, under the leadership of Dupleix, aroused English jealousy. Intermittent warfare was carried on until the final struggle came in the Seven Years' War. It ended in the overthrow of French power and the conquest of Bengal.

British Imperialism was thus firmly enthroned in America and in India, but already there were the seeds of disruption. In North America, the English colonists had used the military powers of the home country to check French expansion. Having attained their object by the Treaty of Paris they now felt less need of the protection of Britain. For long there had been a conflict of interest between merchants at home, who wished to use them for their own ends, and colonists, who wished to develop their lands in accordance with natural endowments and geographical situation. To the latter the Navigation Acts and other regulations imposed in the interests of the home country were irksome, an unjustifiable interference with economic liberty. The crowning folly came when a British Government in financial difficulties attempted to compel the colonists to contribute to the national exchequer on the ground that the maintenance of troops in North America was a cost which could be justly charged to the colonists. The colonists, with no representation at Westminster, resented such impositions, the more so because administration of the colonies was vested in governors who were usually retired colonels and the like, completely out of touch with democratic sentiments in a new country. They were, says Trevelyan, "as little suited to mix with a democratic society as oil with vinegar." So fundamental a difference of outlook made conflict inevitable. Trevelyan thus sums up the position. "English society," he says,

> "was old, elaborate and artificial, while American society was new, simple and raw. English society was based on great differences of wealth, while in America property was still divided with comparative equality, and every likely lad hoped some day to be as well-off as the leading man in the township. In England political opinion was mainly that of squires, while in America it was derived from the farmers, water-side mobs, and frontiersmen of the forest."

The final outcome of the struggle was the *Declaration of Independence* on July 4, 1776, and its recognition by Britain, six years later.

CHAPTER XVI

BEGINNING OF SELF-GOVERNMENT

THE recognition of American independence by Britain, in 1782, marks the beginning of a new period of imperial history. It extends to about 1870. Several circumstances combine to give it distinctive features. First, there was an industrial revolution at home, with ever-increasing output of goods and need for ever wider markets Small and sparsely populated, the colonies did not appeal to the industrialist. His market was the world. Industrial capital took pride of place. Freedom to dispose of goods anywhere and everywhere seemed to offer to the restless spirit of the new age greater possibilities than the economic strait-jacket of imperial trade as practised and promoted by mercantilist interests in the earlier period. To the new industrialist, therefore, restrictions on trade, which had grown up in the previous two centuries, were irksome They were unsuited to the age of *laissez-faire* and individualism Colonies were unimportant They were liabilities rather than assets. Their maintenance was a financial burden on the home country already groaning under a heavy load of taxation Indeed, the secession of the American colonies, so soon followed by the revolt of the Spanish colonies, lent support to the view that colonies are merely temporary acquisitions, costly during their period of tutelage, and with little gratitude at the end of it

A second circumstance characteristic of the situation was a great flow of emigration which moved in a rapidly expanding stream during the eighteenth and nineteenth centuries Break-up of the clan system and the widespread adoption of sheep farming in Scotland sent thousands of Highlanders to people Prince Edward Island, Ontario and many another district in Canada and America. While economic necessity was the driving force, the attractions of life in a new land were themselves sufficient to tempt many to leave their native land. The wave of emigration was already in full flood when the American colonies declared their independence. Though the war interrupted the movement, it revived with increased vigour when hostilities came to an end In the nineteenth century it swelled, as agriculturalists, displaced craftsmen, wage-earners weary of factory life and industrialism, together with Irishmen driven to desperation by the struggle for sustenance, turned their backs on their native land

Depression, following the Napoleonic War, materially stimulated the movement Thousands went to the United States, where they helped to people the Middle West Between 1815 and 1830 no less than five new states were founded along the Mississippi Valley Still greater numbers emigrated to Canada In some years the figures reached 20,000 Many of the incomers were Scotsmen, thus giving to Canada that powerful Scottish strain which has so deeply influenced her traditions, and after the famine of 1822 Irish emigration swelled the movement From about the middle of the century, when industrialism was making headway on the Continent, European peoples went in their thousands to North America. Australia was at first little

affected, because so far away. For fifty years it remained a useful dumping-ground for convicts, but the prospects of sheep farming were attracting free settlers before 1830. Meantime the Government was financing emigration to South Africa.

There are two significant facts about this new movement of people from the old to the new world One is that the emigrants were ordinary folk, anxious and willing to make a fresh start in a new land. It is true that many were persuaded to go by unscrupulous agents and shippers, but it was a relatively free movement of some of the best strains of the population. The other outstanding fact is that such people, unlike the tobacco and sugar planters whose object was to exploit the colonies for their own profit, employ slave labour and live on their ill-gotten gains at home in Britain, went out to settle. It is not surprising that they soon felt that the destinies of their new lands should be in their own custody. In short, self-government for colonies peopled by British settlers under the new conditions was regarded from the start as inevitable and wholly desirable. Some believed that they would shake off British rule sooner or later and establish complete independence. There were others whose attitude was less pessimistic and more constructive. A rapid growth of numbers at home gave rise to the fear that numbers were outstripping the means of subsistence. It was argued that the colonies offered a promising outlet for the redundant population. Jeremy Bentham and James Mill were among those who accepted this view. Though others believed that emigration was no solution of the unemployment problem and that the money so spent could be used to greater advantage by improving conditions at home, their views profoundly influenced colonial policy, hence a widespread belief that the goal of colonial policy should be self-government as an alternative to separation.

A third circumstance deeply influencing Empire history was the growth of humanitarian sentiment. It registered its greatest triumphs by the abolition of the slave trade in 1807 and of slavery throughout British possessions in 1833. That this great reform could be carried out in face of the bitter opposition of the powerful vested interests of planters, of shipowners and others, shows how remarkably the conscience of the people had been stirred. A wave of popular sympathy with the underdog and of disgust with conditions prevailing in the British colonies was contingent on an enthusiasm for foreign missions as an aftermath of the Methodist revival. Naturally the missionaries took the side of the depressed native peoples, and vivid accounts of slave conditions sent home by them were declaimed from many pulpits No more direct way of influencing public opinion and arousing the feelings of decent men and women could have been devised; and Parliament dared not ignore the results.

This movement in the history of the Empire signifies a dramatic change of outlook Instead of regarding colonies exclusively from the point of view of trade, as had been the fashion in the previous two centuries, thinking people were beginning to look on them as places where other human beings lived. The missionary viewpoint of "Exeter Hall" was that native peoples should be cared for and protected from gross exploitation by merchants and adventurers. The white man should be the guardian of as yet backward and

as such helpless folk He should treat the possession of colonies as a sacred trust. It was the supreme tragedy of the century that this view could be so lightly discarded towards the close of it, when industrialists at home and abroad competed for spheres of influence in Africa and elsewhere. Once more colonies came to be regarded as places to be exploited in the interest of the white man, and the natives simply as hands, useful as labour in mine and plantation Until about 1870 the public attitude was otherwise. The two main principles of colonial policy were that colonies which could profit by it should have self-government, and that native peoples should be protected from exploitation, their lands being held in trust by the colonial power.

PROTECTION OF NATIVE PEOPLES

Down to the early nineteenth century a comparatively uniform system of government existed in the colonies. The administration consisted of a Governor, the representative of the Crown, a Council consisting of members nominated by the Governor and performing executive functions, and an Assembly customarily elected by white settlers on a low property qualification. For long the Assembly played merely a minor part in government. Step by step it gained powers over taxation. In Canada the issue between the colonies and the home government was in fact the demand of the Assembly for full control over finance, and the concession of this was what led directly to self-government.

In the West Indies and the new sub-tropical colonies acquired after 1801, the problem was not solved so easily. There the white settlers were a mere handful The mass of the people were backward, illiterate and as yet incapable of playing an active part in government. Down to this time the home government had been content to leave the native peoples to the tender mercies of the white settlers, and to view with equanimity and approval the employment of slave labour In the new age such views were no longer tolerated Inspired by a new humanitarian and missionary zeal, the British Parliament which had abolished the slave trade in 1807 used its utmost endeavours to persuade colonial legislatures to improve labour conditions The colonial department of the new Office of War and Colonies, under men deeply influenced by the missionary outlook of the time, was determined to improve the conditions of plantation life. Where persuasion failed, the home government acted directly over the heads of the colonial legislatures, as it did when it passed the memorable Act of 1833 abolishing slavery.

Clearly this did not solve any problems of colonial government Indeed it intensified them. The concession of responsible government was acceptable neither to the white settler, who saw his influence swamped by the black, nor to the home government, which realized the uselessness of a system of self-government to people not yet capable of operating it. The pivotal problem of the treatment of subject races came into focus. Are native peoples to be left to the mercy of white settlers or must the home government act as trustees for them until such time as they are capable of managing their own affairs? Be it said to the credit of the early Victorians, they accepted the onus of trusteeship. Ramsay Muir put it, "the old ideal of political liberty was coming into conflict with the new ideal of social justice."

A way out was found by adoption of the system known as Crown Colony government. A Governor represented the Crown, an executive council composed of officials and a single-chamber legislature, consisting of officials and members nominated by the Governor, advised him Such was the system applied to the new colonial acquisitions, and it seemed the only solution of the perplexing problems of the West Indies. In 1864 Jamaica had a population of nearly half a million. There were only 1,457 voters—"a handful of white oligarchs, a smaller number of coloured demagogues, and a huge black residuum in a state of complete political inertia." A negro revolt in 1865, though of economic origin, brought the political issue to a head. The drastic action of the Governor, who sanctioned military execution of 354 negroes and shooting without trial of nearly 100 others, showed that the old system of government was out of step with the sentiment of the age, incapable of functioning with even a modicum of efficiency and humanity. In the following year it was replaced by Crown Colony administration Very soon similar steps were taken in other West Indian islands. The colonies thus acquired a strong paternal government which soon gained the confidence of the negroes. "It is hardly open to question," says Leonard Barnes,

"that the apparently retrograde step of confiscating the old political liberties of most of the islands was actually their salvation."

The gross exploitation of the natives by the planters was now at an end; and the full benefits of the Emancipation Act were realized. Still, such a political change was but a small step towards political and social liberty for the masses Trusteeship entails responsibility for education undertaken to make backward peoples fit for the conduct of their own affairs, and the task of education had hardly begun when the tradition of trusteeship went into eclipse. Meanwhile the hold of the home country on its West African possessions was strengthened. They were mainly settlements founded in the days of the slave trade, and still under the control of the African Company In 1821 the company was wound up, but its various possessions, including Sierra Leone and the Gold Coast, were retained for use in combating the slave trade. The struggle of the humanitarian group in the Commons is evident in two principles of government laid down by a Parliamentary Committee of 1837.

"(1) So far as the lands of the Aborigines are within any territories over which the dominion of the Crown extends, the acquisition of them by Her Majesty's subjects, upon any title of purchase, grant, or otherwise, from their present proprietors, should be declared illegal and void.

"(2) The protection of natives is not a trust which could conveniently be confided to colonial legislatures. . . The settlers in almost every colony having either disputes to adjust with the native tribes or claims to urge against them, the representative body is virtually a party, and therefore ought not to be the judge in such controversies"

(Quoted Leonard Barnes, *Duty of Empire*, 1935, 132)

In southern and eastern Africa the story is different; but this belongs to a later phase of imperialism which started with the partition of Africa in the last quarter of the century.

SELF-GOVERNMENT

Colonies with a predominantly white population had the prospect of a different solution The policy of self-government was supported by men of widely different outlook. Manufacturers of the new machine age attached little importance to colonies as markets for their products. So they did not object to the grant of self-determination to the colonists. Those who regarded colonies as liabilities to be liquidated as quickly as possible saw it as a means of realizing their object. Those who still wished to retain an intact Empire as an outlet for an expanding population in the Homeland sympathized with the same idea for another reason. The issue was settled by the colonies themselves. As they grew in economic and political stature it was clear that withholding self-government would entail a disastrous repetition of the American experience. The problem was first tackled and first solved in Canada After the conquest of Quebec by the British, the French retained their language, customs, religion and ways of living unimpaired. Meantime, Ontario was peopled by some ten thousand United Empire Loyalists who left the old American colonies when they severed their connection with Britain Their numbers were swelled by immigration from England and Scotland There were thus two peoples in Canada, people of different national origins, language, religious beliefs, traditional culture and social organization. It was too much to hope that such divergent communities would sink their differences and unite under a common government In 1791 the home government tried to solve this problem by creating two separate colonies, Upper Canada (Ontario) and Lower Canada (Quebec) each with the then usual type of colonial government, i e with a representative assembly having control over legislation and taxation, a governor sent out from Britain and an executive council nominated by him Here as elsewhere the system led to friction as the colonists demanded more power and authority for their own assemblies In Lower Canada the assembly was almost wholly French and the council entirely British. In Upper Canada government was embarrassed by the assemblies which exercised their power to withhold supplies.

Besides such causes of political conflict, there were deepseated economic reasons for a divergent interest between Quebec and Ontario Ontario was sparsely populated by hard-working immigrants who tilled their lands amidst forest clearings, fighting every inch of their way against almost insuperable obstacles. They had little marketable produce, being too far away from the sea to bring themselves into touch with large markets. The fur trade, which came down the Ottawa River to enrich the fur lords of Montreal, passed them by. Any little trade they did carry on had to pass along the St. Lawrence where French Canada levied customs on both imports and exports. Quebec itself was a pattern of pre-revolutionary France. The settlers kept themselves isolated from the vigorous colonizing movement of the times, ruled by the dictates of a priesthood which discouraged commercial enterprise. While the

settlers worked their small farms stretching along the banks of the St Lawrence, the valuable fur and timber trades remained largely in the hands of London and Glasgow capitalists. The French were jealous of their national traditions. When the British American Land Company, founded in 1833, planned to settle the area between the Richelieu and the Chaudiere Rivers, the settlers were up in arms, fearing that they would be swamped by English immigrants of Protestant stock.

In both colonies the machinery of government was almost at a standstill. In Lower Canada a deadlock between the Assembly and the Council came in 1834, when a commission of inquiry was sent out from London. In effect it proposed suspension of representative government. There was great resentment throughout Canada. In 1837 disturbances took place in both colonies. The British Government saw the writing on the wall. It promptly sent out Lord Durham to report on the situation. On his return he presented a famous report. In his proposals there was nothing very original or striking It is doubtful if he really appreciated the possibilities of Canada or the obstacles to be overcome in bringing about its political and economic unification. His solution of the immediate difficulty was to unite Upper and Lower Canada in the hope that the French settlers would ultimately be outnumbered by the British. Realizing that nothing short of self-government would satisfy the colonists he recommended the grant of responsible government except on questions involving strictly imperial interests, such as control of public lands, trade, defence and foreign policy. The kernel of his proposals was that the executive in Canada should be directly responsible to the representatives of the Canadian people. An Act of 1840 carried the first of Durham's proposals into effect It united Upper and Lower Canada under a government consisting of a Legislative Council composed of life members and a House of Assembly with equal numbers from each province. The grant of responsible government was not implemented immediately; but it was not long delayed. Such discrimination between domestic and imperial interests as Durham proposed was too difficult to sustain Under the governorship of Lord Elgin a momentous change came about, without any Act of Parliament, by convention and custom (E L. Woodward, *Age of Reform*, 1938, 362–6).

THE FUR TRADE

Long before the railways came the fur traders had been pushing westwards, discovering many routes across the immense spaces of Canada. The two chief centres of the fur trade had been Montreal and the Hudson Bay. The end of the Seven Years' War marks the beginning of a new era in this vital trade of Canada In 1763 it was thrown open to all on the payment of a licence fee. Very soon Montreal was inundated with traders from other colonies as well as from New York, all anxious to take advantage of the concession Competition between them was bitter and eventually, in 1783, the principal traders amalgamated with the aid of British capital and founded the North West Company of Fur Traders. This powerful organization was a challenge to the old-established Hudson's Bay Company which had penetrated southwards and westwards from its old trading posts on the Hudson

Bay. The rivalry between the two companies led to much exploration. Agents of the North West Company reached the Fraser River and tried to monopolize trade on the Pacific Coast, thus preparing the way for the settlement of British Columbia. Meantime an American Company—the Pacific Fur Company—was floated and established itself on the Columbia River in 1811. There it was conveniently situated for carrying on trade with China. Being an American company its activities could be restricted neither by the British Navigation Acts nor by the monopoly of the East India Company. The clash of these companies soon raised the question of the American-Canadian boundary. This was not finally settled until 1846 In Canada proper the competition of the Hudson's Bay Company and the North West Company frequently resulted in bitter feuds. Their methods of trade brought demoralization both to those whom they employed and to the native Indians, often persuaded by one side with lavish use of liquor to break bargains made with the other (Fig. 78).

An important incident in this commercial rivalry was the founding of the Red River Colony by Lord Selkirk who was interested in the emigration of Highlanders. He had planted many Scots on Prince Edward Island and in Ontario In 1812 he proposed the establishment of a settlement on the Red River in the district now known as Manitoba. By securing a controlling interest in the Hudson's Bay Company he was able to obtain a grant of 116,000 acres of land in the district which dominated the various fur trade routes to the east Though the settlement met with failure, except for the founding of a small frontier colony, the attempt was important It established a British claim to the Middle West and so excluded Americans. In addition it so intensified bitterness between the two fur companies that amalgamation became the only solution of their claims This came about in 1821, when the Hudson's Bay Company absorbed its rival (Fig. 79)

In the early nineteenth century efforts were made to improve transport facilities between the Great Lakes, then the nodal point of the fur trade, New York and Montreal. The Erie Canal, started in 1817, ran from Buffalo on Lake Erie to the Hudson river, thus establishing through water communication to New York The Canadian retort was to deepen the St Lawrence and to construct the Welland Canal between Lakes Erie and Ontario, so to cut out Niagara The two routes from the Lakes to the sea were of immense benefit to Ontario, but they were the occasion of much commercial rivalry between New York and Montreal, a rivalry which in fact lasted for the best part of the century. The Hudson route had the advantage, since it was open all the year round; and as the fur traders penetrated westward other natural routes were discovered, like that from the Red River southwards to Minnesota and the Missouri. There was thus a growing tendency for Canada's economic development to take place in close association with that of the United States. The main trade routes ran north and south, not east and west. The commercial interdependence of the two countries caused alarm among those who wished to see Canada pursue an independent existence. When it was clear that Americans were ready to lay claim to the unpeopled tracts of the Middle West and were getting a financial interest in the economic life of Canada, immediate action was urged to check the

forces which appeared to be relentlessly drawing the British colony within the orbit of the American economic and political system. In 1818 agreement was reached to fix the boundary between the Lake of Woods (at the western end of the Great Lakes) and the summit of the Rockies along the forty-ninth parallel of latitude Where it should lie in the vast region between the Rockies and the Pacific was left open. The only inhabitants at the time were trappers and traders of both countries. For many years rivalry was still keen. Both countries wished to lay claim to the Pacific shore. Eventually the issue was decided in favour of Canada. In 1846 the boundary line was extended along the forty-ninth parallel to the sea. This gave Canada what came to be called British Columbia and Vancouver Island.

Settlement of the boundary did not check the natural economic development of Canada in close association with that of the United States. The tendency was reinforced by removal of the restrictions on colonial trade embodied in the British Navigation Acts; but even before the railways came, the forces drawing the two countries together were still in full flood. In the 'fifties, the Canadian Grand Trunk Railway had as its main objective access of Canada to the Atlantic through the United States and the development of traffic between the two countries. It was essentially an international railway Even after the *North America Act* of 1867 it steadily pursued its original aim.

POLITICAL AND ECONOMIC UNIFICATION

Pursuit of a free trade policy by Great Britain involved withdrawal of preferences on corn and timber. This and the fear of economic penetration of Americans into the Middle West and on to the Pacific shore was at the root of a move to bring about Canadian federation. For a time the abolition of the trade preferences made Canadians look with favour on the United States with whom they concluded a reciprocity treaty. Meantime came the first Canadian tariff imposed on British goods Every force seemed to be throwing Canada into the arms of the United States. Then came the Civil War in 1861. While it lasted it opened up a large market for Canadian produce, but at its conclusion in 1866 the Americans decided on protection of the home market, and refused to renew the Reciprocity Act with Canada. Canada was now thrown on its own resources. Combined action of all parts of Canada was its only defence Between Ontario, Quebec and the Maritime Provinces there had been tariff barriers, and even within the two Canadas machinery of government set up in 1840 was not working satisfactorily. Large-scale immigration of British people to Ontario had given rise to a demand for increased representation on behalf of Upper Canada, a proposal objectionable to Lower Canada on the ground that it would result in the re-establishment of British Protestant supremacy While each colony had its own local interests, there were clearly wider issues of common interest; and it was becoming clear that some sort of federation was the only solution of their common problems. The Canadian colonies were weak, the United States strong. Unless the people of Canada would come together, the custody of the Middle West might be a prize to American interests Another argument favoured unification The Civil War had laid bare some of the weak points in the American

constitution. Those who had hitherto been most enthusiastic for union with the United States were now less sure of the wisdom of such a step.

Such was the situation in which the Dominion of Canada took shape. It was not a scheme imposed by Britain It was a product of Canadian statesmanship The *British North America Act* of 1867 established a plan of federation which could be extended from sea to sea At first only the old colonies, now called provinces, came into the federation, but there was provision made for admittance of new ones as population extended westwards. Neither political nor economic unity could be finally achieved without improved communications This fact was recognised by the promoters of the Act. So far the Maritime Provinces had little trade with Quebec and Upper Canada Their commerce was by sea with Great Britain and with the United States. On the other hand, Upper and Lower Canada, while using the St. Lawrence in summer time, kept up close trading relations with the United States by means of the waterways and the American railways There was thus conflict between economic and political interests Economically the trade with the United States was profitable, but it was inimical to the political unity of Canada in the modern sense of the term. Such unity demanded some link between the two Canadas and a port in the Maritime Provinces Declaring "that the construction of the Intercolonial Railway is essential to the consolidation of the Union of British North America," the Act of 1867 made provision for building a line from the St. Lawrence to Halifax in Nova Scotia Completed in 1876, this line made a wide detour to the north of Maine to avoid American territory The determination to keep the line within the bounds of British territory at any cost was a triumph for national sentiment, but it was a very costly triumph When finished it was 250 miles longer than economic considerations necessitated. Later the Canadian Pacific built a line direct from Montreal to St John through the state of Maine. Even so, the United States seaports of Boston and Portland were better situated for carrying the trade of Montreal. From the start the political boundaries of the federation cut across the natural economic channels of trade

The story of the Canadian Pacific begins with an Order in Council of 1871, when British Columbia was admitted into the new Dominion. The Canadian Government then undertook to build a line from the Pacific across the Rockies to join British Columbia to the Canadian railway system. The task was gigantic, involving a track of 2,500 miles through country then with a population of less than 20,000. All manner of political and economic conflicts arose. In the United States railway building had already made great progress, and the most reasonable connections would have been with the system already constructed south of Lake Superior; but these lines were in the territory of the United States at a time when Canadians and Americans alike were out to capture the trade of the Pacific Coast. There was also conflict of interest between Ontario and Quebec It would be wearisome to traverse intimate details, corruption and endless clash of varying policies and interests, triumphs over almost insuperable natural obstacles, or the lasting achievements of Donald Smith, afterwards Lord Strathcona and Mount Royal, and of his cousin George Stephen, afterwards Lord Mount Stephen. Suffice it to

say, that the first section to be completed ran from Lake Superior to Winnipeg and the Red River—"a waste of forest and rock and swamp, every mile of which had to be hewn, blasted or filled up." In June 1886 the first C.P.R. through train ran from Montreal to Port Moody on the Pacific coast.

"Canada now had a line of its own which tapped every Province, except Prince Edward Island," says Knowles. "And whereas Lord Dufferin had to make his pilgrimage from Ottawa to British Columbia in 1876 by way of Chicago and San Francisco and thence by ship to Esquimault, the representatives of British Columbia could now reach the legislative capital by a comfortable journey entirely through their own territory" (*Economic Development of the British Overseas Empire*, 1930, ii, 267).

This great road of steel did more than anything else to weld the various provinces into the present Dominion of Canada, and so to counteract the economic pull towards union with the United States. An attempt to break the monopoly of the Canadian Pacific led to the founding of another transcontinental system Starting from Winnipeg it radiated eastwards and westwards "By leases, by absorption and amalgamation and by construction, the system reached out east and west, following a course in one direction from Winnipeg along the north of Lake Superior to Nipigon, Lake Huron, and Quebec, and westerly to Prince Albert and Battleford in Saskatchewan, through Edmonton, across the Yellowhead Pass, when it dips south to Vancouver" (Knowles, 281).

SETTLEMENT

The railways conditioned the economic development of Canada. Before their day the fur traders had explored; but they had not settled. They were not agriculturalists nor miners. The first settlement in the west was established by Lord Selkirk in 1812 on the Red River; but it long remained a mere outpost of little economic importance. In 1870 Winnipeg was still a village of 215 souls. Its expansion came with the railway, and from there organized settlement spread northwards and westwards. In 1926 the population of Winnipeg was 192,000, and that of the province of Manitoba 639,000 Many British, Europeans, and Americans went to people the great prairies of the north-west, drawn by the facilities offered both by the railway companies and the Government, as well as by the unknown possibilities of the land Between 1886 and 1927, 2,235,671 people left the United Kingdom for British North America; only 357,994 came from other countries. This might seem to support the view that colonies are outlets for the population of the imperial country. In reality, figures of total emigration from the United Kingdom show that more people went to the United States. Of the 8,632,652 emigrants from the United Kingdom between 1886 and 1927, 3,992,880 (46·3 per cent) went to the United States and 2,235,671 (25 9 per cent) went to British North America* (Figs. 80 and 81).

At the close of the Victorian age Canada was being peopled slowly. Its vast economic possibilities were appreciated and each year saw it steadfastly

* See *The Balance Sheets of Imperialism*, by Grover Clark, Carnegie Endowment for International Peace, New York, 1936, p. 48.

advance towards its own economic and political destiny. Steamships on the St. Lawrence and the Great Lakes, railways pushing out westwards and eastwards, were paving the way for settlement and wheat growing. The economy of Canada was changing from one based on wood and water to one based on iron and steam with wheat as a staple export. The population of Ontario increased from 952,000 in 1851 to 1,396,091 in 1861. Its production of wheat soared from 12 million bushels in 1851 to 25 million bushels in 1861. The centres of population and wheat production now moved westwards.

Before the close of the century, Manitoba was the chief wheat-producing area of Western Canada. Then the opening of the Saskatchewan valley by the railway created new wheat fields. Saskatchewan began to grow wheat in 1892 and Alberta in 1898. By 1909 Saskatchewan surpassed Manitoba as a wheat-producer, and before long Alberta did likewise The striking fact about Canada's economic history has been how late and suddenly she has become a great producer of this crop. In 1883–90 the wheat production of Western Canada averaged 8 3 million bushels, in 1891–7, 19·2 million bushels, between 1898 and 1904, 47·0 million bushels, in 1918, 189 million bushels and in 1928, 566 million bushels. All the while Canada was developing other resources, her timber, her minerals and her coal. On this basis she has built up important manufacturing industries, of which the greatest is the production of paper and pulp.

AUSTRALIA

In some respects British expansion in Australia resembles that in Canada. The immense territory presented to both explorer and settler serious problems of transport and marketing. Moreover, a large part of the country consisted of arid wastes which even yet have defied settlement and exploitation Her immigrants were drawn mainly from Britain So her people, like those of Canada, established in the land of their adoption social and political institutions amidst which they had themselves been nurtured From responsible government they passed to self-government. The various legislatures were knit together into the *Commonwealth of Australia* in 1900 There are, indeed, several important differences between the Dominions, apart from obvious geographic and climatic conditions Australia had no linguistic, religious and cultural problem such as existed in Canada, and no rich neighbour like the United States from whom she could attract capital and enterprise Consequently, Australia's economic system has been much more closely bound up with that of the homeland. The peculiar social problem with which she had to contend in her early days was created by the policy of the British Government when Australia was a convenient dumping-ground for convicts and undesirables.

Save for a few aborigines Australia was still a vast unpeopled continent when Captain Cook made his epoch-making voyages to the Pacific in 1768–79 The Government at whose instigation these voyages of exploration and discovery were undertaken did not appreciate the untold possibilities of this new land. Doubtless this was largely a reaction to the struggle for American independence, which fostered a growing conviction that colonies were liabilities

rather than assets New territories were neither sought nor desired; but Cook's reports presented the Government with an easy solution of a problem that had become acute since the secession of the thirteen united states. In accordance with the penal practice of the times, a place had to be found to which convicts could be deported In January, 1788, a warship, three storeships laden with seeds, implements and cattle, together with six transports carrying 750 male and female convicts arrived off the coast of Australia. The first settlement was made at Port Jackson, near what is now Sydney. Other transports followed, bringing cargoes of hapless and demoralized human beings to swell a small community hedged about by dense woods and bounded by the great wall of the Blue Mountains.

At this stage of Australian history a sort of communism prevailed. The convict gangs had to work in the fields, but the produce belonged to the colony Each member received his ration from the central commissariat store mainly provisioned by supply ships. As yet the settlement was not a colony. It was an open-air prison. A ship of free settlers first arrived in 1793. This opened a new era in the history of the country, but the large number of convicts already there, with the many who came later, constituted a formidable problem of social organization within the settlement. The free settlers got grants of land and assignments of convict labour to work it; but the colony was not at once ready to dispense with the pre-existing method of distributing supplies to the prisoners. The colony was not yet self-supporting In the absence of satisfactory currency, rum, issued as one of the rations of the convicts, became a medium of exchange. Free settlers also paid their wages in rum. For the community itself the result was disastrous For countries that could export it rum became a highly profitable commodity For upwards of twenty years "it remained the customary means of paying wages," says Shann.*

"So great was the fame of the propensity of the inhabitants of this colony to the immoderate use of spirits and the certainty of getting any amount of payment in government bills," says Governor King, "that I believe all the nations of the earth agreed to inundate the colony with spirits" (Quoted Shann, 37.)

The problem now facing Australia was twofold: first, to introduce a proper currency and so abolish the rum and barter system; second, to check immigration of convicts and attract more settlers of good stock, skilled in agriculture and trade. The first issue, to which Governor Macquarie applied his mind, offered big difficulties Even after coins had come into use and banks had been established, the scattered economy of New South Wales made a system of barter inevitable. The second problem solved itself gradually. The importation of convicts into the island introduced a degrading element into her economy and created a harsh cleavage between two social castes, the more prosperous free settlers and officials class on the one hand, and the poorer free settlers, freed convicts and their descendants on the other.

As time passed, emancipated convicts demanded improved status, and those anxious to welcome more free settlers from the homeland argued that no large-scale immigration of free settlers could be expected while Australia

* *Economic History of Australia*, 1938, 22.

remained a dumping-ground for convicts Meanwhile, the penal code in Britain was reformed. So only the worst criminals were transported. This merely aggravated a situation about which there was already uneasiness at home. Humanitarian sentiment, now profoundly influencing public opinion, was not without its effect on the trade in convicts Reformers led by Bishop Whately pointed out that transportation, involving a long sea voyage under disgraceful conditions, really meant for many prisoners sentence of death. A Committee of the Commons inquired into the problem in 1832, another in 1837. The latter recommended the abolition of the system. After 1840 Britain sent no more convicts to New South Wales, and the system of assigning convict labour to employers was abolished. The number of free immigrants increased from 1500 in 1830 to 32,000 in 1841

Convict ships still sailed to Tasmania. Between 1840 and 1853, 4,000 convicts a year entered the colony. The degradation and misery brought to the island was incalculable. One official, describing Hobart Town in these wretched days, writes.

"The immense chain-gangs or files, two or three hundred yards long, of men undergoing secondary punishment, all in heavy irons, dressed in yellow clothing and closely guarded by armed soldiers and police, passing along the streets with chains rattling dismally all the way, were the most striking sight that caught my eye after landing"

Some convicts were assigned to private employment. A settler's diary of 1829 contains the following item

"3 November, I have now fifteen prisoners who do the whole of the work of the farm without my paying a shilling in wages, but how much looking after they require! C—l, the fellow who was flogged well for his idleness, is now learning to thrash and after this week he shall thrash or be thrashed, without putting me to the trouble of looking after him." (Shann, 94–95.)

In 1853 this vile system was abolished in the eastern colonies and in Tasmania It lingered on for another thirteen years in Western Australia. Meantime the number of free settlers was increasing rapidly; and the trade of Australia was expanding In 1842 exports from New South Wales to the United Kingdom were valued at £298,507 and from Van Diemen's Land or Tasmania at £134,150 For the same year the imports into the colonies from the United Kingdom amounted to £598,045 and £260,730 respectively According to MacInnes, exports to Great Britain amounted to £6,469,000 by 1860 and imports from Great Britain were worth £10,597,000. By 1914 the figures had risen to £34,500,000 and £41,000,000 respectively

SHEEP FARMING

The clue to this phenomenal increase is twofold, the trade in wool and the discovery of gold The story of Australian wool goes back to the successful experiments of John McArthur, when he crossed some Bengal ewes with a young Irish ram in 1794 He tells us himself of his success in these words·

"By crossing the two breeds I had the satisfaction to see the lambs of the Indian ewes bear a mingled fleece of hair and wool This circumstance originated the idea of producing fine wool in New South Wales "

Rapid expansion of this great staple trade of Australia, which has remained its greatest economic asset to the present day, was due to several circumstances. One was advances in scientific breeding of stock. Another was the result of exploratory trips which resulted in discovering vast tracts of incomparable pasture lands beyond the Blue Mountains. Contemporaneously, rising demands of the English cloth industry went with a decline of the supply of wool from the Continent of Europe. At the turn of the century, when English manufacturers were loudly complaining of the scarcity of raw material, McArthur announced that there were "tracts of land adapted for pasture so boundless that no assignable limits can be set to the number of fine-woolled sheep which can be raised . . . with little other expense than the wages and food of the shepherds " In 1821 the imports of wool from New South Wales and Van Diemen's Land amounted to 175,000 pounds. John McArthur was awarded a gold medal "for importing into Great Britain wool the produce of his flock equal to the finest Saxony " Vast empty pasture lands and prospects of sheep farming fired the imagination of free settler and convict alike. Despite attempts at official control, men went beyond the mountains driving their sheep with them and pegging out claims in no man's land. Professor Robert has thus described the procedure adopted by these squatters·

"A man of small capital acquired a flock and simply set out . Each was a land-freebooter scanning the horizon for unoccupied or unclaimed land. He was an 'overlander,' nursing his sore-footed flock, watching every pinch of flour in his bullock-dray of rations, and looking for his plains of promise or his long-dreamt-of mountain pastures. Over the desert and the mountains, over the sun-baked plains and the flooded marsh-lands he went, either seeking some vague landmark dimly hinted at by a previous explorer or one of his rivals, or, more often, trusting to his destiny and his bushman's sense to find virgin country in the general direction in which he was moving. . . He kept on despite distance and drought, starvation and disease, attacks by the blacks and desertions by his men. He was staking everything, often his life, on finding a suitable 'run' for his sheep, and until he reached his haven, nothing else counted " (Quoted Shann, 100.)

Very soon large companies were formed to exploit this El Dorado. There was wild speculation in cattle, sheep and in land itself. One of the greatest of the companies formed was the Australian Agricultural Company which started operations in 1826 A Scots minister who witnessed the orgy of speculation thus describes it

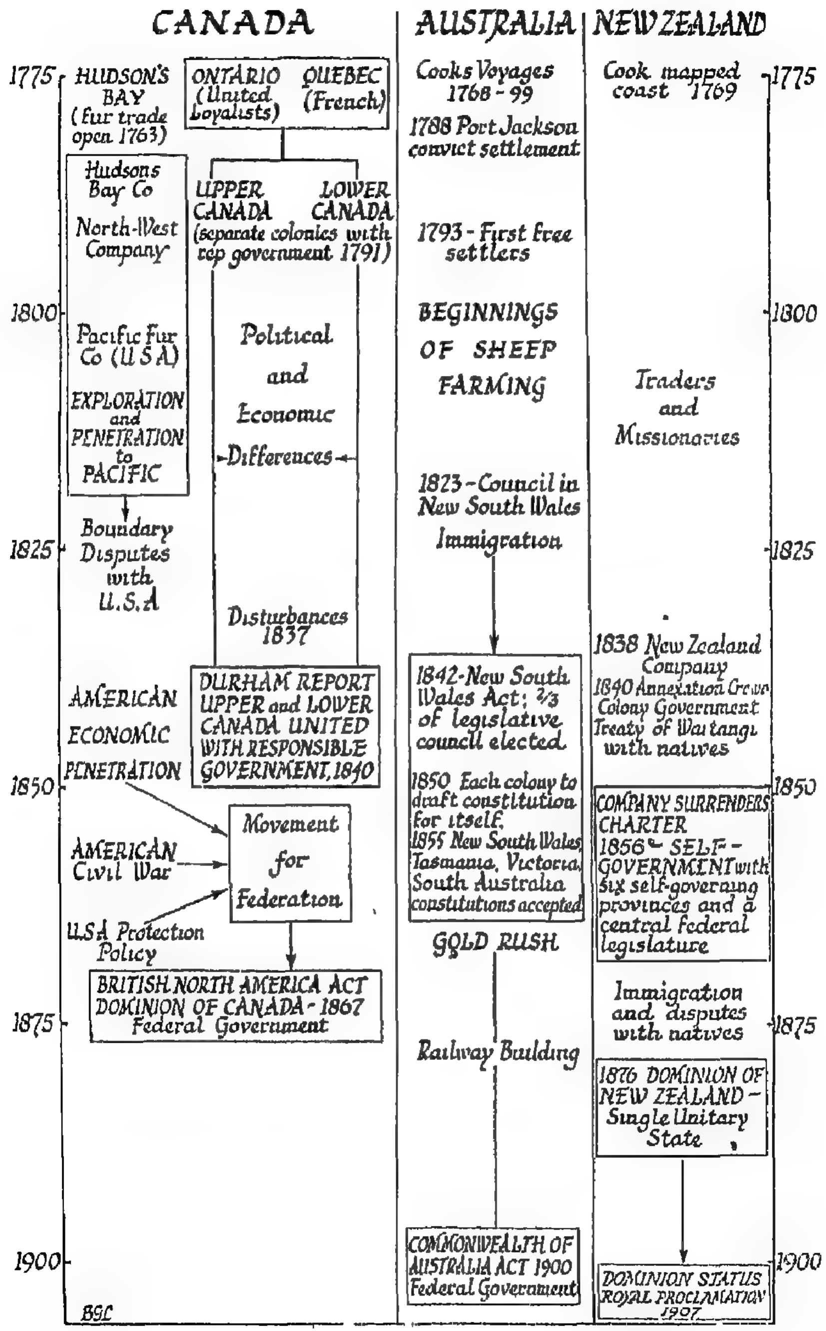
"As cattle and horses had to be purchased for the company wherever they could be got, the price of agricultural stock rose rapidly throughout the colony, insomuch that cattle of colonial breed were actually sold to the company's agent for twelve guineas and sheep for four or five guineas a head. . . . No sooner had the existence of the A.A. Company been announced and its operations commenced in right earnest, than the sheep and cattle mania instantly

seized on all ranks and classes of the inhabitants. The mania compelled whomsoever it seized to the cattle market. . . . Barristers, attorneys, military officers of every rank, civilians of every department, clergymen, medical men, merchants, dealers, settlers, were there seen promiscuously mingled together every Thursday outbidding each other in the most determined manner for the purchase of every scrabbed sheep, scarecrow, horse or buffalo cow in the colony that was offered for sale It was universally allowed that the calculations of the projectors of the A A Company could be inaccurate. It was made as clear as daylight to the comprehension of stupidity itself that the owner of a certain number of sheep and cattle in New South Wales must in a certain number of years infallibly make a fortune. It was determined on all hands that the A.A. Company should not be the only reaper of this golden harvest.
In all cases where the purchaser had money to pay for his sheep and cattle, money was paid Where money was not forthcoming, as was generally the case, credit was allowed It was not at all to be wondered at that persons who were to be so speedily enriched beyond their highest previous expectations should begin to speculate prematurely. Articles were accordingly ordered and bills given for their payment, and so favourable was the prospect of demand for the future that colonial merchants or importers were induced to order large quantities of British and other foreign goods till their warehouses were filled and almost every article of British manufacture could be obtained in Sydney at a cheaper rate than in London" (Quoted Shann, 102)

In Melbourne land sold in 1837 was re-sold three years later at an eighty-fold increase. Banks were floated to share in the golden harvest. In 1834 there were two colonial banks—the Bank of New South Wales and the Bank of Australia. Within five years there were several more; and the total capital of those serving the trade of the colony in Sydney and London amounted to over £2,500,000. Export of wool now soared In 1844 Tasmania and South Australia exported about 5m lb to Britain "By 1850," says MacInnes, "the Australian colonies had successfully ousted all rivals in the wool markets of the world" In 1907 Australia's export of wool amounted to 321m lb., in 1923–4, to 521m lb.; and in 1936–7 to 900m lb.

SELF-GOVERNMENT

A great influx of free settlers into Australia naturally created a demand for self-government. An Act of 1823 had established a nominated Council in New South Wales. A large immigration of free settlers in the thirties and forties, of whom many were Chartists, created the demand for something more in keeping with democratic principles The New South Wales Act of 1842 made provision for the election of two-thirds of the legislative council; but this did not satisfy the natural aspirations of the colonists The experience of Canada aroused enthusiasm among the colonists; and the home government now acclimatized to the view that colonies peopled by immigrants from the homeland were entitled to self-government sooner or later regarded the claims of Australia with sympathy In 1850 it passed an Act empowering each colony to draft for itself a constitution for approval by the Imperial government. This was a welcome concession The Act separated Victoria from New South Wales, and made provision for the future separation of Queensland. The local legislatures secured power to levy duties



Time Chart 18. Towards Self-Government

on British as well as on foreign goods Schemes worked out by the several legislatures—New South Wales, Tasmania, Victoria and South Australia—were approved in 1855 with only slight modifications. Grey's proposal to adopt a federal system was premature. "There was some support for the plan in the colonies," says Woodward, "but the population was too small, the distances too great and common interests too few; the federation of Australia did not take place for another fifty years." At the close of the century, following the phenomenal rise of Japan as a modern political and industrial nation, the subject was receiving renewed attention in Australia On January 1, 1901, Australia started her career as a single Dominion

THE GOLD RUSH

At the very moment when Australia had taken first place as a wool-producer, and had achieved a notable measure of self-government, a new force made its impact on her economic system. Several discoveries of gold had been made before this time; but the Government, fearing the demoralizing effects of a gold rush, tried to check publicity and frowned on attempts to prosecute further search In the long run it was impossible to check an impulse which held out such great promise of wealth "In 1851," says Shann (168).

"the atmosphere suddenly changed. In February, E. H. Hargraves, a squatter who had returned from California, tested his theory that the rocks and flats near Bathurst closely resembled the gold-bearing country over the Pacific, and found it true Taking the gold to Sydney, he persuaded the Colonial Secretary that an announcement would stop emigration to California and end all possibility of renewed transportation He accepted the offer which Smith declined, and within a few weeks his 'Ophir' field had infected the whole colony with the gold fever By mid-May 400 miners were 'puddling' for nuggets and gold dust From stations, farms and city streets came 'new-made miners, some armed with picks, others shouldering crowbars and shovels, and not a few strung round with wash-hand basins, tin-pots and cullenders' "

Despite opposition from the pastoralists who saw their livelihood threatened and a well-ordered economy undermined by an influx of gold diggers, the boom got under way In a few months Australia had entered on one of the most hectic periods in her history Squatters deserted their sheep for the more exciting life of the mine Thousands of immigrants poured into the ports. In September 1852, 19,000 people landed at Melbourne, for the whole year 94,664, seven times as many as the number of arrivals in 1851. Three years later the population of Victoria was 236,798, and in 1857, 410,766, thus surpassing the parent colony of New South Wales with a population of 305,487 Gold mining now passed from the hands of free independent miners to companies carrying on operations on a large scale. The labour problem of the mining areas was complicated by a large admixture of Chinese labour. So great was the hostility they excited that several States imposed immigration restrictions, to the embarrassment of the Imperial Government which had accorded the Chinese perfect liberty to take service in British

colonies and to travel on British ships, at the Convention of Pekin in 1860. In the sixties the several Chinese Restriction Laws were repealed, but hostility of the Australian people to the newcomers did not die down When the Commonwealth was established in 1901 it imposed new restrictions on the yellow races.

Though the gold rush created many serious social problems for Australia, and for a time brought great disturbance to pastoral life, the final balance was in her favour. A large inflow of British folk completely swamped the old convict element and its descendants, bringing to the country a strain of vigorous settlers brought up with democratic views. The population of Australia rose from 405,000 in 1851 to 1,168,000 in 1861 The increased numbers and the new wealth stimulated agriculture and industry. Sheep farming remained the main activity; but the demand for food encouraged wheat growing, stock raising and fruit growing Wheat soon became an important export.

TRANSPORT

Transport was all-important from the start In the early days convicts had been employed in making roads, but they were poor roads. These were followed by the turnpikes. The scarcity of labour and the dispersion of the population made communications difficult and upkeep impossible. The bush-coach introduced by American settlers dispensed with the need for good roads.

"Light and supple, they rattled over the inequalities of thousands of miles where the formation and upkeep of roads were beyond the means of a thin skirmishing line of settlers. You might drive them up a hillside or through a forest, or over a 'road' which had set into a thousand deep ruts of baked mud. To arrive anywhere, if you did not ride a horse, there was no other choice." (Shann, 285.)

Starting in 1853, Cobb & Co. built up an elaborate transport system before the days of railways. "By 1870," says Shann, "Cobb & Co. in the three eastern colonies were harnessing 6,000 horses per day, their coaches were travelling 28,000 miles per week, their annual pay-sheet exceeded £100,000 and they received £95,000 per annum in mail subsidies" (285) Attracted by the expansion of wool and gold, British capital flowed into Australia in the seventies and eighties to build fences, provide water supplies, and to join the great ranches by telegraph and railway. Between 1860 and 1876 £50,000,000 were raised in Britain for investment in the Australian colonies, chiefly for railways and other public works (Jenks, *Migration of British Capital*, 231). In 1872 Australia had less than 1,200 miles of railway and "nowhere," says Shann, "did a line penetrate more than 180 miles from the coast." Between 1871 and 1880, 2,681 miles were built. The stimulus to farming and industry was remarkable. Flocks increased from 21,000,000 in 1861 to 106,000,000 in 1891, cattle from almost 4,000,000 to 11,000,000, and the wool clip from 78m lb. to 543m lb. Before the close of the century the steamer was cheapening transport; and refrigeration made it possible to bring frozen mutton to Britain.

In 1935 the total population of Australia was 6,735,000, more than two-thirds being concentrated in urban areas Sydney and Melbourne alone held about 34 per cent of the population Such a high level of urbanization has had profound effects on domestic and external policy It has been at the root of Australia's tariff system It partly explains the quick rise to prominence of the Labour Party and the steady progress of Australian social legislation. Belief in the right of every man to a fair and reasonable standard of living has prompted the "white Australia" policy with its restrictions on immigration, its high tariffs and its arbitration and minimum wage legislation. This is not to say that Australia is a homogeneous community of interests While Victoria and New South Wales and, to a lesser extent, Queensland are industrial, Tasmania, South Australia and Western Australia are largely agricultural. The clash of economic interests between these two groups of states is seen in the fight over tariffs and in the recent move for secession of Western Australia from the Commonwealth Even within some of the States, notably New South Wales and Queensland, there is friction between farmers and manufacturers

NEW ZEALAND

The establishment of British sovereignty in New Zealand furnishes a striking illustration of the Victorian marriage of humanitarian idealism to capitalist exploitation The coast of New Zealand had been mapped out by Captain Cook in 1769 For many years after, the Government took no steps to enforce its claim to sovereignty pegged out by Cook At this time there was no appetite for Empire as such; and only traders or missionaries frequented the islands in the early years of the nineteenth century. Many of the traders were of the worst sort. Most of them came from New South Wales, and the goods they dealt in—muskets, gunpowder, rum and whisky—is eloquent of the type and of the influence they were likely to have on the native population. Missionaries had established themselves on the island in 1814 Some of them took advantage of their position to secure grants of land; but their main object was the conversion of the natives to Christianity, and they favoured the establishment of a native government.

At home Gibbon Wakefield, whose interest in colonization was felt both in Canada and Australia, urged on the Government the vast potentialities of the islands and the misuse to which they might be put by escaped convicts and other disreputable traders as an argument for promoting colonization. With the aid of Francis Baring, he founded the New Zealand Association to carry out a plan of "systematic colonization." Fearing that this might involve Britain in the active affairs of the country, the home Government did not welcome the proposal; but they agreed to refer the matter to a Parliamentary Committee set up to consider the treatment of aborigines in British settlements "This report," says Woodward, "is the most remarkable expression of liberal opinion on the treatment of aborigines put forward by any Parliamentary inquiry during the nineteenth century"

The Committee recommended delay in carrying Wakefield's scheme into effect; but in August 1838 the Association was transformed into a company

for the colonization of New Zealand, and a ship was despatched there immediately. The French were thinking meanwhile along the same lines. Doubtless it was fear of being forestalled that made the British Government send Captain Hobson, senior naval officer in Australian waters, to negotiate with the Maoris for cession of sovereignty to Britain When the French arrived at New Zealand in 1840 they found it under British rule. The Treaty of Waitangi was concluded with the natives (Fig. 82). In return for cession of sovereignty to Britain they were guaranteed their lands, but Britain secured the right of preemption should any be offered for sale Soon the colonists came into conflict with the natives and there were many disputes over land tenure. The callous attitude of the high officials of the New Zealand Company is evident in a letter of January, 1843, from the governor to the colonial office.

"We have always had very serious doubts whether the Treaty of Waitangi, made with naked savages by a consul invested with no plenipotentiary powers, without ratification by the Crown, could be treated by lawyers as anything but a praiseworthy device for amusing and pacifying savages for the moment." (Quoted Woodward, 376.)

In return for monetary compensation the Company unwillingly surrendered its charter in 1850. The charter itself had brought many emigrants to the colony and had ridden roughshod over the rights of the Maoris. Henceforth New Zealand was to have the usual institutions of a Crown colony, but the influx of white settlers soon made a greater measure of self-government inevitable. The immediate problem was how to devise political institutions satisfying to the needs of a sparsely populated country. In 1846 a federal scheme was afoot. There were to be two provinces each with its own legislature For common matters, such as management of Crown lands and customs, there would be a general assembly of two houses An Act of 1852 amended this proposal, and set up six provinces with a central federal legislature. Four years later the settlers got self-government; but the natives were excluded, since the qualification for the franchise was ability to read and write English. Further increase of the number of white settlers, from under 60,000 in 1856 to 350,000 in 1878, led to more disputes with the Maoris over land. By the end of 1859, 32,000,000 acres of the South Island and nearly 7,000,000 of the North Island had been sold to immigrants. Such extensive alienation naturally aroused grave misgivings among the leaders of the natives. Their tribal institutions were threatened and their means of livelihood were undermined. War broke out in 1860 and lasted for nine years. The root of it was the land-lust of the white man. Naturally the military scales were weighted heavily against the native. When war was over the Maoris were disillusioned and resentful. Happily a more conciliatory attitude on the part of the British prevailed henceforth. In 1867 the Maoris secured direct representation in the House of Representatives Nine years later the several provincial legislatures were abolished (Fig. 83).

New Zealand now became a single unitary state with its government at Wellington. The wool industry was expanding rapidly, and with it New Zealand's trade with the outside world. In 1853 the export of wool was

valued at £67,000. Between 1855 and 1859 exports to Great Britain rose from £30,869 to £317,045. By 1870 the total exports of the country exceeded £4,500,000 This great expansion was contingent on a steady inflow of settlers and capital from Britain. Thereafter the movement was checked. Immigration ceased and population remained almost stationary till the steel steamer came to the rescue At the close of the century trade once more moved upwards. In 1914 New Zealand's total foreign trade stood at £45,000,000, 63 per cent of it being with the United Kingdom.

INDIA

Three important points must be kept in mind, when discussing the social history of India One is the enormous extent of the country, equivalent in size to Europe if we exclude Russia and Finland. This vast land is the home of about 400 million beings of many types and creeds. There are forty-seven principal languages and innumerable dialects. Next, we have to be clear about the fact that almost every stage of social development exists in one part of India or another In Lord Morley's words, its peoples have been "marching in uneven stages through all the centuries from the fifth to the twentieth" In some places the prevailing economy is primitive, in some medieval, in others modern. Throughout most of the country cultivation of the soil conforms to an ancient pattern Everywhere the arts of spinning and weaving survive in the home as throughout the centuries. The skill of India's loom weavers was the envy of Englishmen in the seventeenth and eighteenth centuries, and it is still one of her assets. In some districts modern exchange methods have hardly touched the system of barter In others the transition has been recently accomplished. In some towns an industrial revolution is now in full swing with repercussions on native life in distant provinces, where migration to towns and factories has given simple people an after-taste of the horrors of early industrialism in Britain India is a country which has been moving swiftly, though very unevenly, from medievalism to modern ways of life in the course of a single century; and we should not forget that India had an ancient and highly developed civilization when the homeland of five hundred years ago was at a very early stage of economic development.

The other fact we have to remember is that India's history has been greatly influenced by geographical circumstances In the north there are vast mountain ranges giving birth to the great rivers of India—the Indus, the Ganges and the Brahmaputra Southwards are the great plains through which the rivers flow, and beyond lies the mountain plateau, bordered on the east by a narrow plain in the Bombay Presidency and by a wider plain on the east in Madras. The two richest and most easily developed districts have therefore been the basins of the Ganges and the Carnatic on the eastern shores It was to these districts that the English went in the seventeenth century. Of the two, the basin of the Ganges is the most valuable. There it was that Britain and France struggled for supremacy in the eighteenth century The conquest of Bengal in 1757 made Britain master of the richer region, and ultimately master of India.

THE EAST INDIA COMPANY

The East India Company which had carried on trade for almost two centuries now became a powerful imperialist body. The home Government had not yet assumed responsibility for India. Under the leadership of Clive, the Company tried a scheme of dual government in Bengal. The Nawab was recognized as the ruler and the Company itself was the tax collector This system naturally gave agents of the Company extensive powers liable to gross abuse There was no co-ordination between the several embryo states, before Parliament passed, in 1773, an Act which left the political power in the hands of the Company, but established its control over their activities The Presidencies of Madras and Bombay came under the governorship of Bengal. In effect the Governor of Bengal thus became Governor-General. The same Act established a Supreme Court independent of the Company. Subsequent Acts of 1780 and 1784 established parliamentary control over the administrative work of the East India Company

Growing hostility at home to the commercial monopoly of the Company reached a climax during the Napoleonic War. Search for new markets and the increasing importance of the cotton industry at home promoted the view that trade should be free from monopolistic restrictions, and persuaded the Government that such extensive powers as the Company enjoyed should be brought to an end Accordingly trade with India was partially opened in 1813, though the Company still retained its monopoly of trade with China intact. Thereafter its trade with India fell off and its political activities increased Twenty years later the remaining trading monopolies of the company were abolished

"A Company that maintained armies and retailed tea, that carried a sword in one hand and a ledger in the other, was a contradiction, and had she traded with success would have been a prodigy," said McCulloch in 1836. (*Dictionary of Commerce*, 535.)

Trade with China was now free for all. Henceforth the East India Company became an administrative instrument for carrying on the government of India, but the Company gained by curtailment of its functions, because it received as compensation an annuity of £630,000 charged on the territorial revenues of India (Woodward, 389). The end of the trade monopoly of the East India Company led to a great expansion of Britain's traffic with India. At home, the cotton industry had quickly surpassed all other industries in scope and exports. India was now an inviting market. For centuries English merchants had been at their wits' end to discover some marketable product that could be shipped thither. Clearly woollen cloth was not in demand in so hot a country; but cotton goods were eminently suitable for it. To be sure India had a cotton industry of her own; but England had machine production. It could now produce cloth more cheaply and of good quality.

India was also a valuable source of raw materials. She could supply raw cotton, hides, jute and dyes for Britain's new industries. Before 1833 the East India Company had closely guarded trade and had refused to let British people buy up land with a view to farming or plantation. An exception was

made on behalf of indigo planters who were in fact the only white people allowed to settle outside the towns, and they had to have a special permit. These restrictions were abolished in 1833 After that there was a rush of British capital to India. In earlier days the chief exports of India had been products of highly skilled craftsmen. Now raw materials for Britain's industries and food for her growing population were in greater demand. Britain supplied management as well as capital India supplied the cheap labour and natural resources. On this basis large plantations came into being

India's foreign commerce thus began to assume its modern form, i e. mass export of raw materials Experimental cargoes of jute were shipped to Dundee in the thirties. By the middle of the century most Dundee manufacturers were substituting Indian jute for Russian flax and hemp. The Crimean War which interrupted supplies from Russia firmly established Dundee's dependence on the jute of Bengal Tea planting started in 1834. Not until the second half of the century did it become an important industry of India By 1870 there were 295 proprietors with 31,303 acres yielding over 6m lb of tea. By 1872–3 the plantations covered 304,588 acres with a yield of 14¼m lb. Meantime export of coffee, cotton, indigo, oil and hides was on the upgrade. India was thus being drawn into the economic system of Great Britain, supplying it with some of its essential raw materials and taking from it manufactured goods That this change was not effected without considerable hardship to the Indians is undeniable. Her spinners and hand-loom weavers suffered from the competition of Lancashire factories both in her own home market and in the other eastern markets served by her.

RAILWAYS AND PUBLIC WORKS

A new period in the history of India started in 1857, the year of the Mutiny. In practice the government of the country had largely passed from the East India Company to the Imperial Parliament. It now became the explicit responsibility of the Crown. On the advice of Disraeli, Queen Victoria assumed the title of Empress of India in 1877. The outstanding feature of this new period of India's history is the construction of railways, which helped to break down the isolation of the interior and to make capitalist penetration both easier and more effective. Measures had already been taken to abolish local barriers to trade. So rapidly had Western influence spread before 1850 that it had begun to cause resentment among educated Indians They now felt that their country was being moulded by an alien race on alien lines. Such resentment became explosively articulate in the Indian Mutiny. When order was restored the Government shared the enthusiasm for railways of the industrialists. Roads of iron would provide an effective means of moving troops to keep order and so to create a unified India

Before the Mutiny British shareholders had invested very little capital in India. The heavy expenditure of the company on military campaigns and annexations was mainly met from rupee loans raised in Calcutta and subscribed to by agents of the company and other British residents When such people retired to England, they continued to draw interest In this way, India paid to Britain a tribute of between £3,000,000 and £4,000,000. The possi-

bilities of India as a field for investment provided sufficient guarantees were forthcoming, were quickly appreciated. Lancashire interests, for instance, strongly supported a proposal to build a railway from Bombay to open up the cotton-producing districts of Nagpoor In 1853 Lord Dalhousie, zealous to extend British rule and to introduce Western methods, thus urged the benefits of railways on economic and political grounds:

"Great tracts are teeming with produce they cannot dispose of," he wrote in a minute dated April 20, 1853 (quoted Jenks, 211). "England is calling aloud for the cotton which India does already produce in some degree, and would produce sufficient in quality and plentiful in quantity, if only there were provided the fitting means of conveyance for it" Railways, he goes on, would have "immeasurable political advantages" They would "enable the government to bring the main bulk of its military strength to bear upon any given point, in as many days as it would require months"

To those who believed that the Indian Mutiny was a rebellion of a backward and primitive people ignorant of the benefits of Western civilization, the remedy seemed clear enough India had to be civilized and this could best be accomplished by building railways and construction of public works Railways had already worked wonders at home They might well do the same in India. In short, India was to be moulded to the shape of Britain This identification of anglicization and civilization had a wide appeal to insular Britain Naturally it appealed to the business man and the investor, and those who did not directly benefit in a mercenary way could indulge in the warm glow of well-intentioned superiority. By this time railway building on the Continent was proceeding satisfactorily and was being financed more and more by the continental countries themselves So a new and capacious outlet for capital was not to be treated with moral indifference Laissez-faire principles demanded that the State should not interfere in economic affairs; but India was far away.

British investors felt nervous about lending to a country with languages different from their own, with different customs and with a different social system. The plan finally adopted was for the Government to acquire land, lease it rent-free to companies, and guarantee 5 per cent on the capital Under such conditions British investors were not reluctant to invest their money in India The course of the next twenty years or so saw many companies floated to cut canals, to build railways, to run plantations, to erect irrigation and other public works. Railways were built along the Valley of the Indus, serving both a political and economic purpose. They facilitated troop movement to Afghanistan, and they connected the fertile lands through which the Indus flowed to the coast From Calcutta the Great Eastern line served the Gangetic Plain and made contact with a line from Bombay at Delhi. Harbours were constructed at Karachi, Bombay, Calcutta and elsewhere

It is small wonder that investment of British capital in India became extraordinarily popular. The home government shouldered the risk and guaranteed the investor 5 per cent secured on Indian revenues. According to Jenks, £150,000,000 were invested in India between 1854 and 1869 By 1870

railway building alone had absorbed about £75,000,000. Tea plantations, jute mills and other private ventures, accounted for about £20,000,000. At least £55,000,000 of new Indian debt had also come into British hands. In the seventies capital was flowing from London to India at the rate of £5,000,000 per annum. The fact that interest was guaranteed on public works did not encourage economy. "All the money came from the English capitalist," said an Indian Finance Minister in 1872,

> "and so long as he was guaranteed 5 per cent on the revenue of India, it was immaterial to him whether the funds that he lent were thrown into the Hoogly or converted into brick and mortar."

True, Government agents supervised construction; but this was no check on lavish expenditure. In 1868 the cost per mile of railway in operation averaged £18,000, excluding dividends upon the guarantee. This was more than double the estimated figure of fifteen years before. Such capital expenditure had far-reaching economic and social consequences. It broke down the isolation of the provinces and provided safe and rapid transit. It facilitated famine relief. It brought into an international system districts which for centuries had been self-sufficing. The peasant and the craftsman were now subject to the international blasts of economic crises. The American Civil War (1861–6) which interrupted the supply of raw cotton to Britain, created a boom in India. India could now fulfil its imperial destiny by feeding Britain with the material for its great textile industry; but the collapse of the boom bringing familiar disaster to many Europeans brought catastrophe with bewilderment to the native subjects of the Empress-Queen. That improved transport facilities in India as in other continental areas were of incalculable benefit few would deny, but the economic advantages were of a different order from those experienced by Britain. Here railway building went on side by side with the exploitation of mineral resources, and the metal industries, which supplied the rolling stock, reaped the benefit. In India no such development took place. The British industrialist welcomed railway building in India as a means of getting contracts for work at home.

Britain was the workshop of the world. So manufacturers joined with investors in their enthusiasm for a new outlet for their products. More than one-third of the capital invested in railway building in India during the eighties was spent in Britain, either on production or on transport charges. Experts were exported to supervise construction and working, and coal was dispatched to drive the locomotives. The remainder of the capital went out as bullion. According to Jenks, there was a net import into India of more than £200,000,000 in precious metals between 1854 and 1869. The consequence of this was far-reaching. Money fell in value and prices soared, bringing great prosperity to those engaged in production for the market, and hardship both to wage-earners and to those whose economic activities were dictated by custom. For them the boom brought no compensating rise in income. "This prosperity," says Jenks, "was a highly precarious one." The westernization of India caused alarm among those who appreciated and cherished the distinctive social background of the country. More than any-

thing else, this fanned the flame of nationalism. In 1885 the Indian National Congress was founded. Ever since then the ferment of nationalism and democracy has been spreading from the educated *élite* to the great mass of the common people. In recent years its growth has been stimulated successively by President Wilson's belated liberalism and by the wave of chauvinism that has spread over Europe Its declared object is now the end of British rule.

A further consequence of the great migration of British capital to India last century arose from the undertaking given by the home government. Till 1901 the railways were unable to earn the 5 per cent guaranteed minimum. The deficit had to be made up from Indian taxation Each year such tribute had to be rendered to Britain, increased by public loans floated to meet an ever-increasing burden of expenditure on the army and general administration of the country These annual payments show up in the figures of India's foreign trade. Each year her export balance increased, but the increased exports merely represented interest payments against which there was no corresponding import. In 1849–54 the average export balance was £4·1 million. In 1869–74 it had risen to £17·3 million "Great Britain," says Jenks (230, 394), "drew income from India in the last quarter of the nineteenth century to expend in developing other areas of the world within her empire and without" Before the first World War the "economic drain" from India to Great Britain amounted to about £20,000,000, by 1929 it ranged between £30,000,000 and £35,000,000.* It has been estimated that over £400,000,000 of British capital are invested in India at the present time. (*The British Empire*, Royal Institute of International Affairs, 126)

Since the end of the nineteenth century India has been moving slowly towards industrialism. In some towns, such as Bombay and Calcutta, an industrial revolution is in full swing. The first effect of Western civilization on India was the decay of her ancient and indigenous industries Hand-spinning and weaving declined as Manchester poured her cotton goods into the country; but machine production had started in India before the present century began. The first successful cotton mill was set up in Bombay. This was in 1853; but it was not until the last quarter of the century that factory production made rapid progress. The Bombay Presidency was and is the chief centre, though mills have been set up in various other places conveniently situated with respect to cotton supplies. "By 1914," says Mrs. Anstey, "India had become the fourth greatest cotton manufacturing country in the world." The first World War, which destroyed Lancashire's export trade, gave a great stimulus to industrial development in India as well as in Japan and China. At the end of the war average profits amounted to nearly 30 per cent.

Meantime India's other main textile industry—jute—was also expanding rapidly. From the thirties raw jute had been exported to Dundee, soon the centre of a flourishing industry. The economies likely to be effected by establishing manufacture at the source of the raw materials, the opening of coal fields and the prospect of cheap labour in India, tempted successful Dundee manufacturers. In 1855 the first large factory to spin jute was set up in India

* *The Economic Development of India*, by Vera Anstey, 1929

with machinery brought from Dundee. At first the product was of poor quality. Before 1900, Calcutta jute mills were vigorously competing with those of Dundee itself. Since then the Indian industry has first captured the eastern and then invaded continental and British markets. In 1928 about 28m yards of jute cloth were exported from India to the United Kingdom In 1936 the figure was just under 133m yards.

This industrial revolution is still in its first phase. As yet the proportion of the total Indian population affected is small; but the social upheaval caused by the introduction of the factory system has already been considerable. Demand for labour has brought people from distant places, uprooting them from a traditional social environment and putting them into conditions which recall the early years of the industrial revolution in Britain It is a striking commentary on the ethic of capitalism that the first Indian Factory Law of 1881 had to prohibit employment of children under seven years of age and to limit to nine hours the labour of children between seven and twelve. For many of the mills were owned by British capitalists who knew that such conditions had long since been prohibited in their own country If Lancashire and Dundee manufacturers protested against such a state of affairs, they protested against unfair competition The manufacturers who had gone to India to get cheap labour now cried out against "the great conspiracy for stifling Indian manufacturers under the guise of philanthropy." British rule has brought many advantages to India Railways, irrigation works and other public undertakings are an inestimable boon to the country; but the Indian nationalist is under no obligation to cherish a sentiment of gratitude towards the real beneficiaries of a highly profitable business undertaking. British business men went to India to make profits. In doing so they have spread technical knowledge and have so far helped India, but scarcely as much as they have helped themselves; and they have done so with complete indifference to the cultural aspirations of those to whom they have brought the amenities and miseries of industrial capitalism.

CHAPTER XVII

ECONOMIC IMPERIALISM

A NEW phase of the history of the British Empire started in the last quarter of the nineteenth century. Economic motives and nationalist sentiment are its predominant characteristics. The old colonies, such as Canada, Australia and New Zealand, had either achieved self-government or were fast approaching that ideal; but the continent of Africa could still offer vast scope to the acquisitive designs and nationalist ambitions of European powers. An attitude, novel by contrast with that prevalent in the earlier part of the century, now took shape. Since the Declaration of Independence, empire building as such had not been fashionable. Many influential Britons, who subscribed to the tenets of the Manchester School, would gladly have rid the country of colonies. They regarded them as unnecessarily expensive, useless economically to the home country Others, of the Gladstonian persuasion, tolerated them as outlets for population, but placed no obstacles in the way of their independence. Disraeli struck a new note when he advocated colonies on the ground that their existence endowed the home country with power and prestige. Such, also, was the view which Ruskin preached when he fired the imagination of the youthful Cecil Rhodes:

"There is a destiny now possible to us, the highest ever set before a nation to be accepted or refused. Will you youths of England make your country again a royal throne of kings, a sceptred isle, for all the world a source of light, a centre of peace, mistress of learning and of the arts, faithful guardian of time-tried principles, under temptation from fond experiment and licentious desires, and amidst the cruel and clamorous jealousies of the nations worshipped in her strange valour, of good will towards men? This is what England must either do or perish She must found colonies as fast and as far as she is able, formed of her most energetic and worthiest men, seizing any piece of fruitful waste ground she can set her foot on, and there teaching her colonists that their chief virtue is to be fidelity to their country, and that their first aim is to be to advance the power of England by land and sea"

We know Rhodes' interpretation of this presumptuous doctrine in his own words:

"I contend that we are the first race in the world, and that the more of the world we inhabit, the better it is for the human race I contend that every acre added to our territory provides for the birth of more of the English race, who otherwise would not be brought into existence Added to which the absorption of the greater portion of the world under our rule simply means the end of all wars" (J G. McDonald, *Rhodes*, 1941, 36).

In the last twenty years of Victoria's reign such views were often used to endow imperialist ambitions with popular appeal. At bottom the motive power was economic: more markets, more sources of raw materials, more outlets for capital. Leonard Woolf sums it up in his book *Empire and Commerce in Africa* (24).

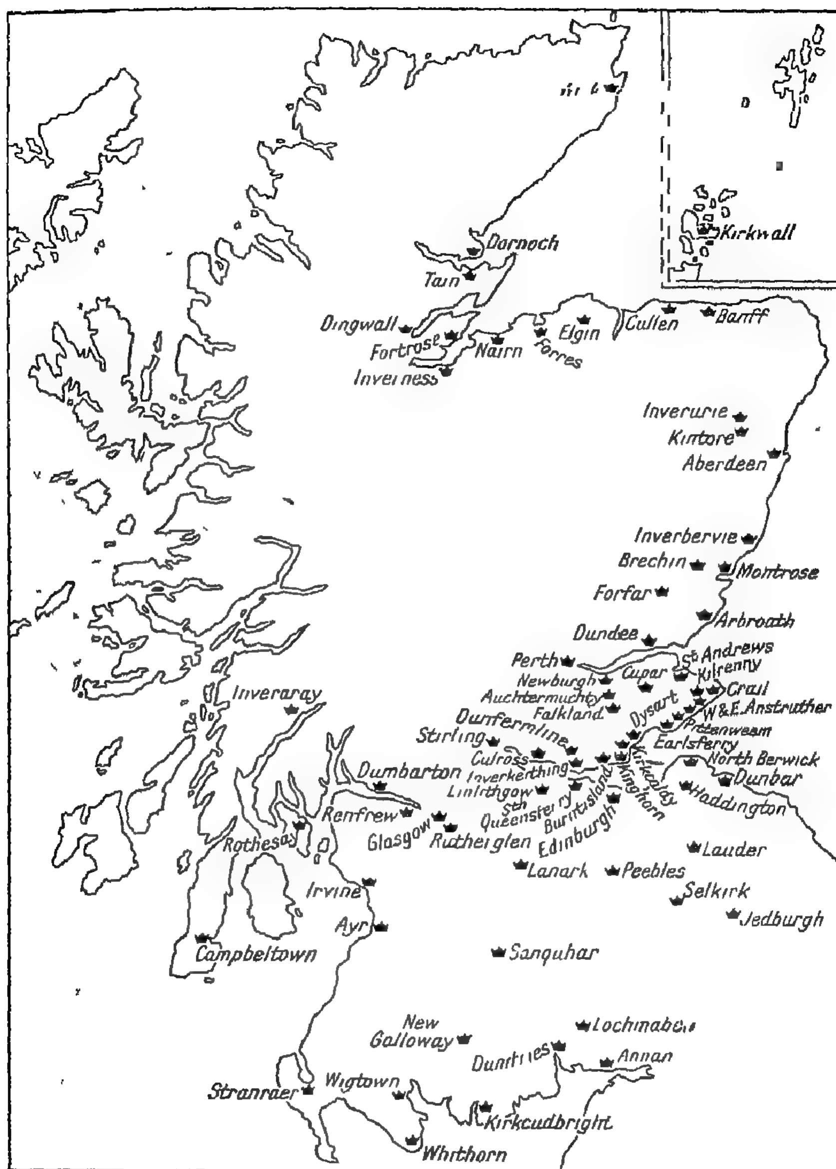


FIG. 97 SCOTLAND THE SEVENTY ROYAL BURGHS IN 1707.

(*By permission of Dr G S Pryde*)

This was the distribution of Royal Burghs at the time of the Union of the English and Scottish parliaments in 1707 As early as 1552 these towns had an organization called the *Convention of Royal Burghs* with very extensive economic and political power Till the Act of Union most of Scotland's trade was with Holland, Germany and the Baltic, hence the large clusters of Royal Burghs on the Firth of Forth Already, there were signs that the economic centre was shifting The Clyde had opened up trade with America

(See p 478)

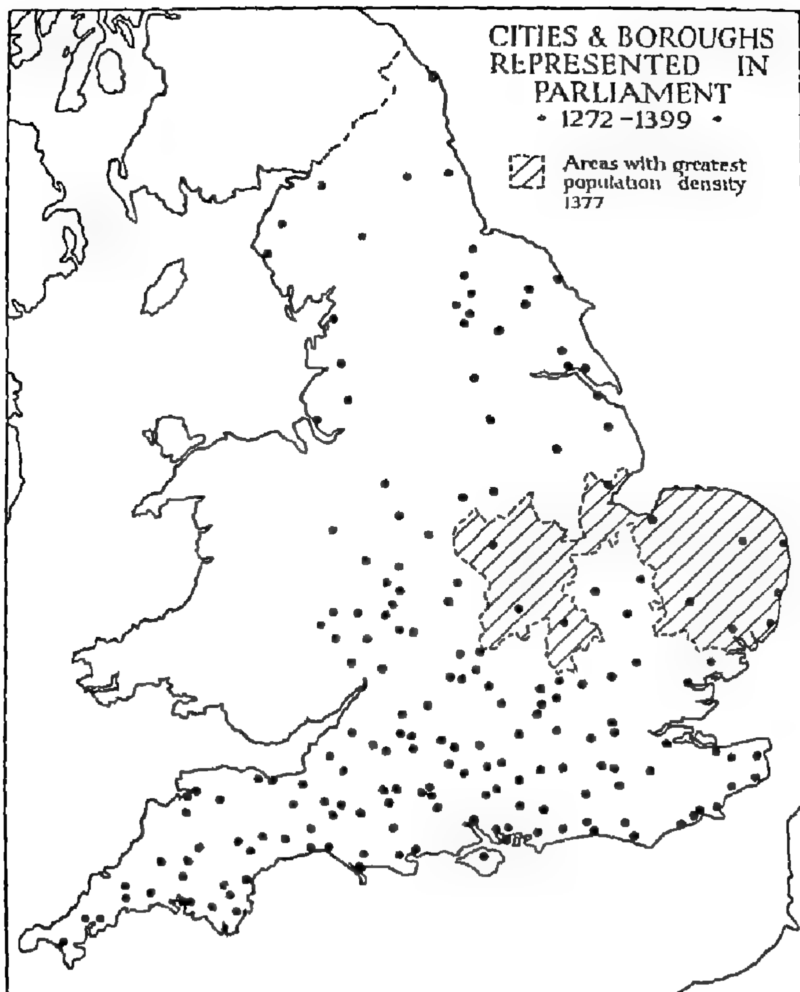


FIG 98. CITIES AND BOROUGHS REPRESENTED IN PARLIAMENT, 1272–1355.

(*By permission from Darby*, An Historical Geography of England before 1800, *Cambridge University Press*)

Parliament originated in meetings of barons whom the king thought it politic to consult on important matters of state at a time when it was not easy for a king, little stronger than his fellow barons, to ignore powerful landed interests The growth of towns and a trading class created a new interest, important to the crown as a source of revenue, hence also one which could not be ignored As early as 1265 chartered boroughs were sending representatives to Parliament This map shows their distribution in 1272–1355 They retained their representation intact till the nineteenth century

(See p 481)



FIG 99 PARLIAMENT IN 1585

(*From* A Print in the British Museum, *by permission of the Trustees*)
(See p 186)

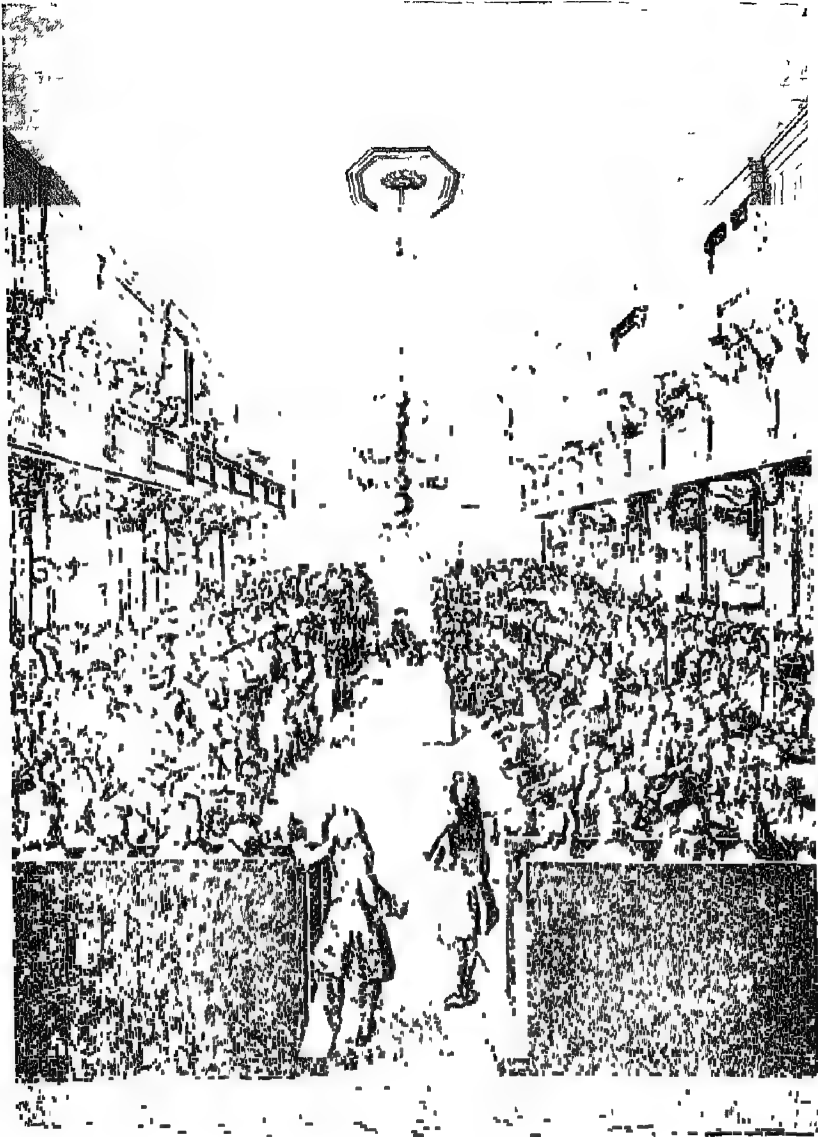


FIG 100. HOUSE OF COMMONS, TEMP GEORGE II

(*Hogarth*)

The general appearance of the House of Commons in this eighteenth-century print of Hogarth is strangely familiar to us to-day Tradition has decreed that the plan of the "mother of parliaments" remains the same in essentials On either side sit the opposing political parties presided over by the Speaker, representative of the Commons and custodian of their ancient privileges

(See p 187)

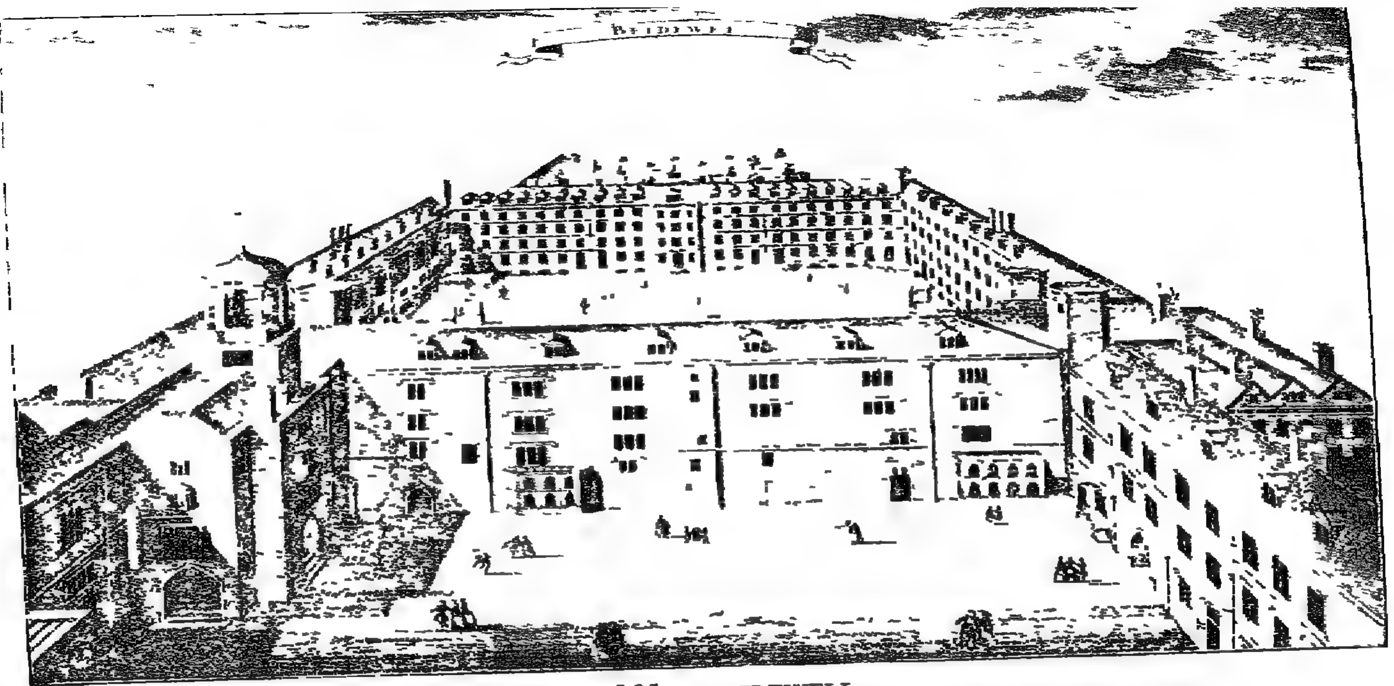


FIG 101 BRIDEWELL

(*Marshall*, The English Poor in the Eighteenth Century, *by permission of George Routledge & Sons*)

In 1552 London citizens petitioned the Privy Council to convert the Royal Palace at Bridewell into a "house of correction"—a place, they explained, where "needy and miserable persons" should be housed and given work Thus was established an institution which became an integral part of poor law administration for the next few centuries Other towns followed suit In time these Bridewells, as they were called, became more like prisons and were called Houses of Correction, where the unruly inmates were required to maintain themselves by their labour

(See p 493)



FIG. 102 A PARISH FEAST, 1741

(*Marshall*, The English Poor in the Eighteenth Century, *by permission of George Routledge & Sons*)

Churchwardens and overseers, the parish poor law authorities, though hard in their dealings with the poor, knew well how to entertain themselves The caption to this illustration reads

"The Revrend Rosy Priest with mirthful glee,
Tosses the Glass to Church Prosperity
His Jolly Clerk no less elated view
Better to Amen here then in a Pew.

The Meager Reader graips a Fowl his prey
Another the Sly Warden does convey
Whilst the Arch Beadle not to Spoil the Joke
Wraps the theiv'd Bottle underneath his Cloak"

(See p 494)



Industry

So prone to Industry and so zealous for Employment have wise Men been in all Ages that they have looked upon Idleness and Inactivity as Crimes of a heinous Nature and those who have searched into Humane Nature affirm that nothing so much shews the Nobleness of Soul as yt it's Felicity consists in Action

FIG 103. INDUSTRY.
(*Bickham*, The Universal Penman, 1733)

That everyone (belonging to the lower orders) should work was a view widely held in the early eighteenth century The youngest child must be trained in habits of industry to add his mite to the country's production Idleness was condemned, charity and poor relief viewed with abhorrence Defoe, representing the view of the business and manufacturing classes, proclaims the virtue of work and writes with pride and satisfaction of the employment of young children Bickham here gives expression to the same view

(See p 497)

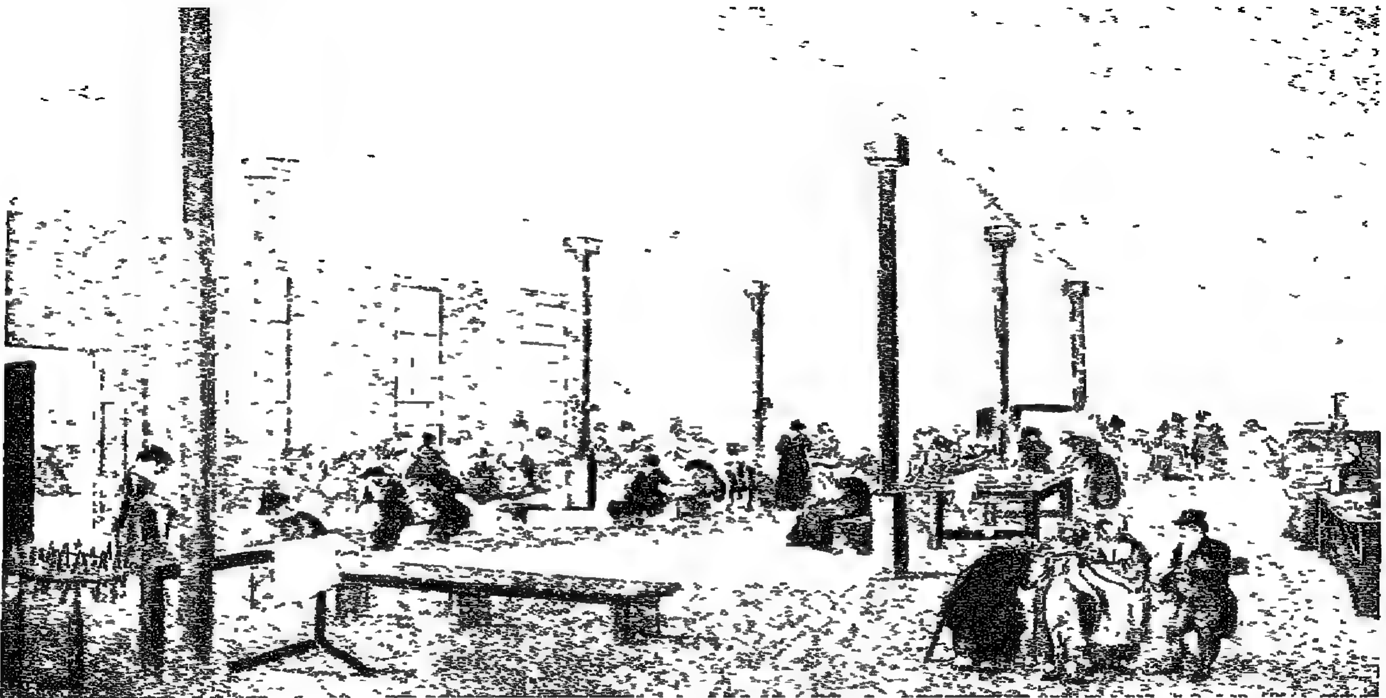


FIG 104 THE WORKHOUSE, ST JAMES'S PARISH

(*Rowlandson and Pugin,* The Microcosm of London, 1808–9, *by permission of the Trustees of the British Museum*)

St James's Workhouse, established in 1716, had accommodation for over 800 inmates This picture shows the Women's Common Room According to the standards of the time it was a good one and its inmates "people of comparatively good character" There were scores of such workhouses up and down the country, varying in capacity from a few dozen to several hundreds Usually they took in all sorts of paupers, children and aged, the imbecile and the dissolute

(See p. 497)

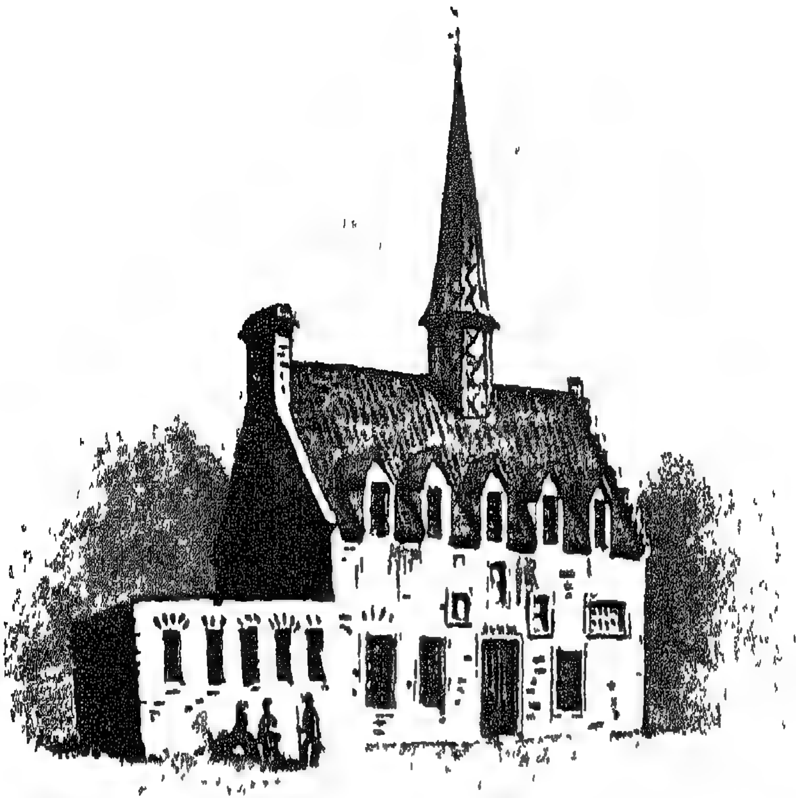


FIG 105 BISHOP DUNBAR'S HOSPITAL AT ST MACHAR'S CATHEDRAL, FOUNDED IN 1531

(By permission of the University of Aberdeen)

When ecclesiastical influence was strong in the later Middle Ages, many such hospitals were established for the relief of the indigent and the old Often they provided a reasonable refuge for the old and were managed with humanity and kindliness The growth of capitalism increased the causes of poverty and created a problem of relief too large for the resources of private benevolence, and hence a new type of relief involving the creation of new institutions for the maintenance of the poor The Bridewell and the House of Correction took the place of the Hospital

(See p. 501)

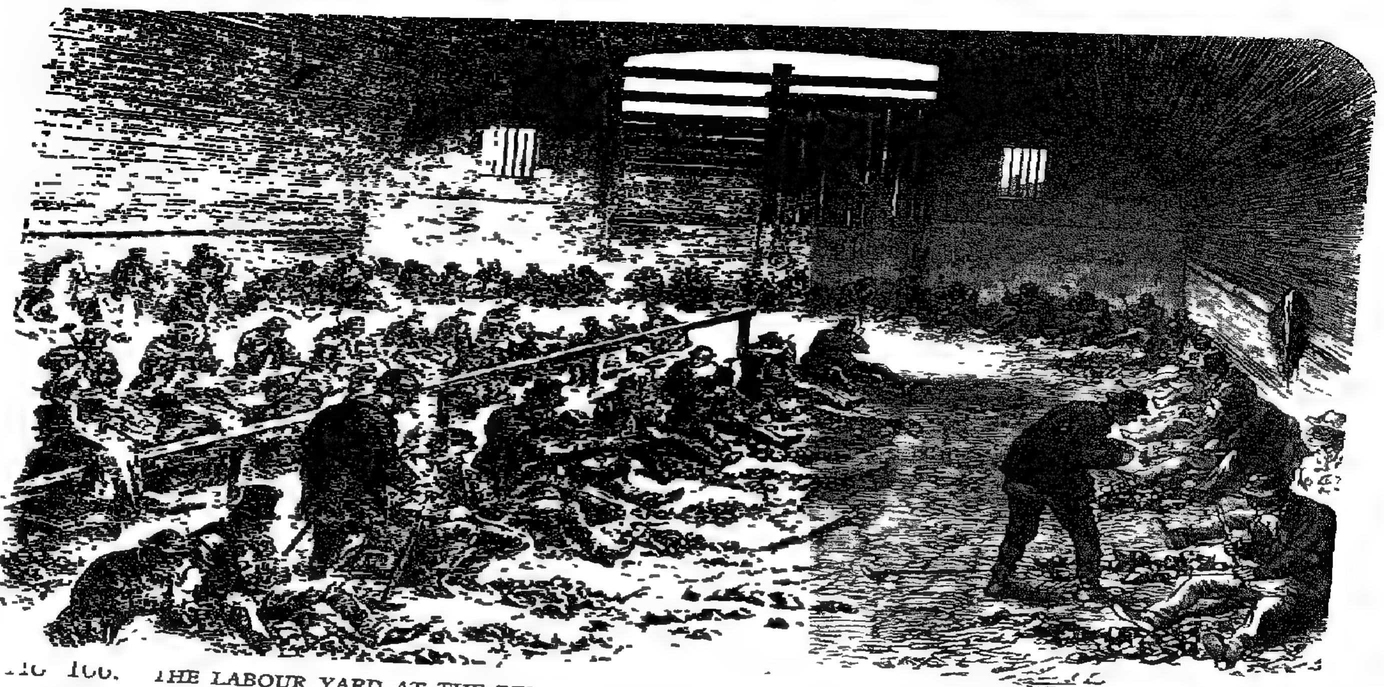


FIG 100. THE LABOUR YARD AT THE BETHNAL GREEN EMPLOYMENT ASSOCIATION, FEBRUARY, 1868

(*By permission of* Illustrated London News)

With a population of 120,000 at this time, Bethnal Green was "the scene of much exceptional suffering among the poor A large part of the population, at the best of times, is on the verge of pauperism, and the stagnation of trade which followed on the commercial crisis of 1866 has deprived many thousands of the industrious poor of their ordinary means of livelihood A great effort has recently been made to prevent these persons and their families from sinking into the hopeless ranks of chronic pauperism . The association endeavours to avoid degrading the industrious poor by any direct almsgiving, all relief, except in very special cases, being given in return for work At a cost of more than £200 a week, the association now employs upwards of four hundred men at nine shillings a week wages They are occupied in cleaning the streets and pathways, and in breaking granite for the roads."

(See p 506)

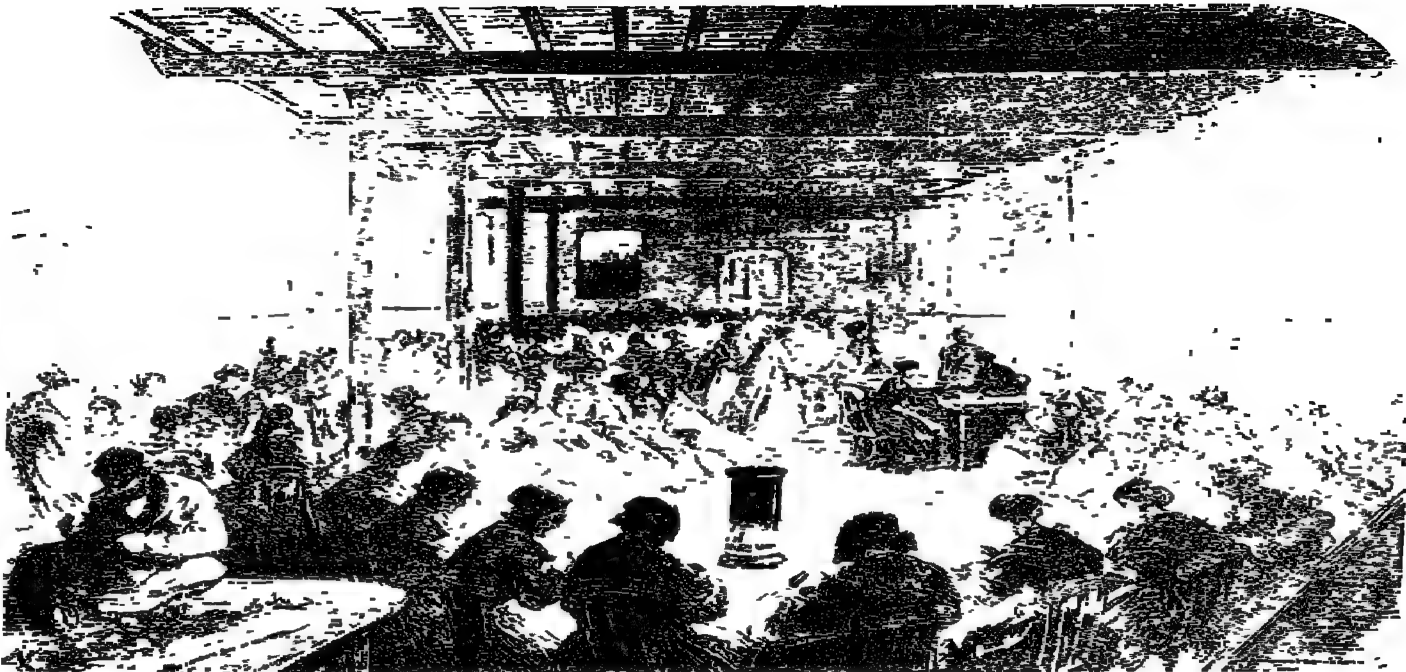


FIG 107. SEWING CLASS IN BERNER STREET, COMMERCIAL ROAD EAST, 1868
(*By permission of* Illustrated London News)

This sewing class was established in connection with the Mansion House Relief Committee in 1868 "Only widows or women whose husbands were out of employment were invited to the working party In the first week, 105 women with 123 children dependent on them were employed, in the second week 115 women with 123 children, and in the third week, 129 women with 203 children The hours of work were from half past nine to half past twelve in the morning, and from half past one to half past four in the afternoon, the women being paid twopence an hour or ninepence for a day's work The cost of carrying on the work was £20 a week, exclusive of materials Besides the sewing class there was a soup kitchen, a district visiting society, a children's dinner fund, and penny readings once a week"

(See p 506)



FIG 108 KING'S COLLEGE, ABERDEEN, 1640

(By permission of the University of Aberdeen)

The College Chapel with its crowned tower still stands intact to-day Near the west door there is an inscription, defining the day and year (2nd April, 1500) when the masons began to build it On one of the buttresses are the heraldic insignia of Margaret Tudor, the queen of James IV Through her the Stuarts came to inherit the English throne, thus uniting the kingdoms of Scotland and England in 1603 The scarlet toga, still worn by some women students, has for centuries been the distinctive dress of the Scottish student

(See p 521)

A Gentleman that has formerly taught *Grammar*, *Writing*, and *Accompts*, being at preſent out of imployment, is ready to accept of an *Uſher's* Place in a School, or to be entertanied as Clerk in Accompts to *Merchant*, *Brewer*, *Woodmonger*, or other Preferment ſuitable to his acquirements, on reaſonable Terms.

He underſtands the *Latin* Tongue, *Arithmetick* in *whole Numbers*, and *Fractions Vulgar* and *Decimal*, *Planimetry* and *Stereometry*, *Gauging*, &c.

FIG 109 ADVERTISEMENT FROM HOUGHTON'S "COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE, 1694"

This advertisement illustrates the impact of economic development on educational practice "Arithmetick in whole Numbers, and Fractions Vulgar and Decimal, Planimetry and Stereometry, Gauging, etc" are mentioned side by side with Latin—the old curriculum and the new

(See p 522)

7



EDUCATION.

We rise above one another in y^e Esteem of y^e World by different degrees of Perfection proportion'd to the Want or Advantage of a liberal Education

William Leekey scrip.

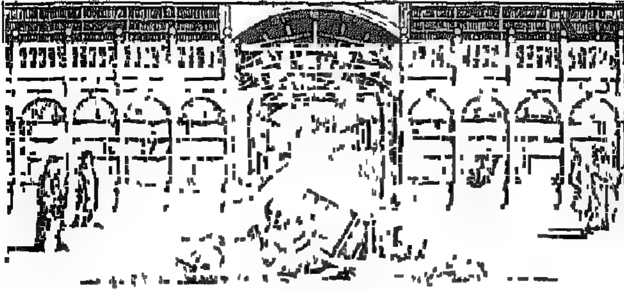
FIG 110 EDUCATION.
(*Bickham*, The Universal Penman, 1733)

Bickham draws a subtle distinction between Learning and Education, stressing such capacities of the individual as education develops and enriches
(See p 520)

A *Writing-Maſter* that writes all the Hands of *England* curiouſly, and underſtands Accompts well, wants an Opportunity of a vacancy in ſome City, or Country Town, or any buſineſs ſuitable for ſuch a Perſon; I can give Intelligence of him.

FIG 111 ADVERTISEMENT FROM HOUGHTON'S "COLLECTIONS FOR IMPROVEMENT OF HUSBANDRY AND TRADE, 1694"

The Writing Master was trained in accounts, and was evidently able to switch from teaching to clerking in a business (See p 526)



LEARNING.

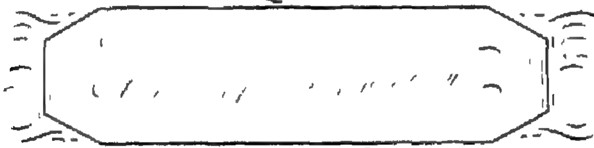




FIG 112 LEARNING

(*Bickham*, The Universal Penman, 1733.)

In eighteenth-century England to be accomplished in polite society was one of the aims of social training

(See p. 526)

"It was in the ninth decade of the nineteenth century that economic imperialism fully and finally established itself In the great States of Europe, now completely industrialized, political power had passed from the hands of birth into the hands of wealth, and the political ideals of rule and power and prestige gave way to those of commerce, industry, and finance. After 1880 European policy is dominated by rival imperialisms, colonial policies, spheres of influence, commercial treaties, markets, and tariffs And wherever these European States use their power and organization outside Europe in relation to Asiatic or African peoples, the motives of policy become more and more clearly recognized and proclaimed as economic ends."

In the mid-quarters of the century, Great Britain had been the workshop of the world. There were few countries that did not know her textiles, her machinery and her ships As the avalanche of goods poured from factory and mill Britain's foreign trade and overseas investment rose by leaps and bounds. The apostles of free trade could point to all this as apparently incontrovertible proof of the success of their teaching, but the process of investing capital abroad catalyzed the economic development of other countries, so creating competition for Britain As the economy of one country after another was revolutionized by the railway and firmly set on the road to industrialism, the scramble for markets and outlets for capital intensified The pace quickened in the last two decades of the century, when the steel steamer triumphed over the sailing ship, swiftly reducing freights and enormously increasing the spate of goods shifted from one part of the world to another. In face of falling prices and the flooding of home markets, one country after another tried to protect itself behind tariff barriers. By 1904, British goods exported to Germany were subject to an average *ad valorem* duty of 25 per cent, though Britain herself stuck to free trade till 1931 Such a struggle to maintain home markets in face of foreign competition intensified the struggle for new outlets overseas. This is what constitutes the chief characteristic of imperialist economy at the close of the nineteenth century. Africa was the most inviting field now that the railway had unlocked the door to its vast and unexplored interior

Till about 1870 we exported capital chiefly to continental countries and to the U.S A Since the United States had much the same sort of economic and social system as Britain, investors were secure. They did not need to feel that external interference on behalf of their business transactions was either necessary or desirable, but export of capital to backward countries, such as South America, Africa or China, was a different matter. Such countries did not toe the line to the capitalist code of debt repayment, regular instalments of interest and the rules of "sound finance" in general. Large-scale business deals now called for direct or indirect intervention in the affairs of less developed countries, for the demarcation of spheres of influence, and for the acquisition of extra-territorial rights In Africa imperialist powers eager to secure a share of its vast resources pegged out their claims in advance, carving up the continent into spheres of influence or protectorates, so-called. The process was extremely rapid. With the exception of Abyssinia and Liberia, the whole of Africa was partitioned in this way during the course of twenty years Between 1875 and 1900 Great

Britain added to her already vast empire about 5m square miles, containing a population of at least 90m people Between 1884 and 1900 France annexed 3,500,000 square miles, not including the Sahara, with nearly 40m inhabitants. Germany took 1m square miles with 17m people, Belgium nearly 1m square miles with 30m people, and Portugal 800,000 square miles with 9m people. Meantime Russia was moving eastwards into Siberia and Manchuria. From Spain, the United States took over Puerto Rico, Cuba and the Philippine Islands.

The new imperialism was nakedly and unashamedly a business undertaking, with the aim of expanding the economic systems of the imperialist powers. London, Paris, Berlin, were the centres of the new order. Jules Ferry, a French Cabinet Minister, thus explains the new point of view in 1885

"It was a question of finding outlets for our industries, exports and capital. That was an absolute necessity, since Europe was closing itself to Europe, to Europe, too, North America was being closed by covering itself with almost prohibitive tariffs; South America was beginning to organize itself industrially. at many other points we remained in competition with English industry, which itself was complaining of the competition of German industry daily growing more active That was why France had to expand in West Africa, on the Congo, in Madagascar. . Colonies are for rich countries one of the most lucrative methods of investing capital. . . I say that France which is glutted with capital . . . has an interest in looking at this side of the colonial question . . . It is the same question as that of outlets for our manufactures (quoted Woolf, pp. 46–7)

Joseph Chamberlain was no less emphatic in asserting that colonies were markets and sources of materials, in short that Empire is a business enterprise. "All the great offices of state are occupied with commercial affairs," he said before the Birmingham Chamber of Commerce in 1897.

"The Foreign Office and the Colonial Office are chiefly engaged in finding new markets and in defending old ones. The War Office and Admiralty are mostly occupied in preparation for the defence of these markets and for the protection of our commerce The Boards of Agriculture and of Trade are entirely concerned with these two great branches of industry. It is not too much to say that commerce is the greatest of all political interests, and that that Government deserves most the popular approval which does most to increase our trade and to settle it on a firm foundation"

Such an exposition of empire development, based on purely material grounds, would not have aroused the tremendous popular interest and enthusiasm that accompanied it, if it had not been sanctified by appeals to patriotism. Accordingly, exploiters of the new lands were pioneers carrying British civilization to the dark continent, bringing to it the example of beneficent rule by a superior people. Pages of school books re-echoed with stories of heroic exploration and of perilous conquest. Teacher and child shared a glow of pride as they scanned the broadening expanse of red on the World Map, and not wholly without a good excuse. Colonial development did, indeed, hold out the prospect of exciting adventure and of ample service;

and some men were no doubt attracted to a crusade which they sincerely believed was to be the salvation of Africa Conquest of native lands, disruption of primitive ways of living, forced enlistment of natives as labourers in mines and plantations, if otherwise deplorable, were salutary and sanitary processes if the outcome would mould the black man to the pattern of his white liberator; and if the latter failed to respond to this engaging prospect, lazy and loath to learn from the white settler, there was an easy remedy for such behaviour. Punishment or the grant of powers to the white man to compel him to labour would consummate the civilizing mission of his betters.

STARTING-POINT OF PENETRATION

Until the nineteenth century, Africa was a vast unexplored continent. For centuries her Mediterranean shore had been known to Europe and was, in effect, part of the European system; but south of the Sahara there was little economic penetration before the close of the nineteenth century. Many centuries before, the Portuguese had navigated the west coast; and had rounded the Cape in 1498. Until the seventeenth century, however, no settlement was made. By that time the Dutch had ousted the Portuguese from this new route to the Far East and equipped a harbour to provision their ships at the Cape In these early days the dread disease of seamen was scurvy, and experience had proved that fresh fruit and vegetables were the antidote. The Dutch, therefore, sent to the Cape numbers of their farmers (Boers), there to settle and to carry on gardening Such was the origin of the Dutch element of the population of modern South Africa Meantime, the English were also attracted to Africa, first to carry on peaceful commerce and then to prosecute the slave trade. The Royal African Company, chartered in 1663, established several forts and trading stations on the west coast (see p. 447). When Parliament decreed the abolition of the slave trade in 1807, the Government retained these old stations to check the slave trade at its source. Later in the century they provided a springboard for inland penetration, by which Britain acquired Ashanti and the Northern Territories. Through Lagos, which was incorporated in the Empire in 1861, as a port from which to stamp out the native slave trade, the British advanced into territories now known as Western Nigeria Later penetration from the mouth of the River Niger brought Northern, Eastern and Southern Nigeria under British control. Thus to the Empire was added a region more than three times the size of the United Kingdom, with a population now more than 20m.

In the south, British advance proceeded from the Cape, which they had taken from the Dutch after the Napoleonic War At first it was simply a port of call for ships on their way to India In 1820 (Fig 84) the Government financed a scheme of emigration and sent out about 6,000 settlers. For long restive under the rule of the Dutch East India Company, the Boers now resented British intrusion, more especially because their views on the colour issue were fundamentally opposed to those of British missionaries and of the Colonial Office in London. The Boers employed domestic slaves; believed in the superiority of the white man, and made short shrift of native tribes if found molesting their farms and pastures. The Act of

1833, abolishing slavery in British possessions, strained relations to breaking point. It deprived the Boers of their slave labour for which they received what they regarded as inadequate compensation. In the spring of 1836 thousands of Boers, with all their belongings, crossed the Orange River and set out to found a new colony. This *Great Trek* of 1836–40 is one of the most remarkable episodes in history. Ten thousand Voor-trekkers moved off into the unknown interior in search of independence (Fig 85). They declared, in a manifesto of February 1837·

"We quit this colony under the full assurance that the English Government has nothing more to require of us, and will allow us to govern ourselves without its interference in future."

They were not to be left long in isolation. The greater number, having fought the Zulus, moved on into Natal, where some British traders had already settled. The home government, at first averse to annexation, changed its policy when the creation of a Boer republic seemed imminent. In 1843 it declared Natal a British colony. The British people were still without great enthusiasm for colonies, and there were many complaints that Cape Colony was involving the Government in endless expense Constant feuds with the Kaffirs, resulting in open warfare, were condemned by politicians and public alike as an unwarranted waste of British taxpayers' money. Meantime other powers were casting longing eyes on Africa. Shortly after 1830, France conquered Algeria. When she suffered defeat by Germany in 1870–1, France turned to Africa to restore her lost prestige. In 1881 she annexed Tunis.

After the opening of the Suez Canal in 1869, Britain discovered a lively interest in Egypt and the route to India. The outcome was the occupation of Egypt in 1882 and the annexation of British Somaliland in 1884. About the same time Italy began to claim Eritrea and the greater part of Somaliland. It was in the area south of the Sahara, however, that there was most scope for economic imperialism The establishment of the professedly international Congo Free State by Leopold of Belgium at once aroused the protective professions and acquisitive aspirations of other powers. A French explorer, de Brazza, mapped out lands to the north of the Congo, and claimed them in 1880 in the name of his government The French were also pushing inland from their outposts at the mouth of the Senegal, hoping thereby to establish a vast tropical empire stretching right across Africa. The British, already interested in the exploration of the Niger by Mungo Park, took alarm at French penetration now proceeding apace by treaty-making with the native chiefs. Farther south, German missionaries and traders were at work near the British settlement at Walvis Bay. In 1884 Germany announced that she was taking this territory under her protection, and at the same time she declared a protectorate over Togoland and the Cameroons. Britain replied by declaring a protectorate over Nigeria

Within a few years various European powers had thus pegged out claims to large parts of African territory. Already there were the makings of many major disputes about boundaries and possessions. At the Berlin Conference

of 1884, under the presidency of Bismarck, representatives of fifteen governments tried to make a gentlemen's agreement about how to divide the spoil They recognized the Congo Free State as the perquisite of Leopold King of the Belgians, and gave it access to the sea by exchange of territory with Portugal. Freedom of navigation and commerce in the Congo Basin was recognized for all nations The other clauses in the agreement were ignored by Leopold, since there was no way of enforcing them. He proceeded to exploit the natives and the resources of the colony in the most reckless manner The Conference also laid down the principles "on which the game of empire-making should in future be conducted." Countries making annexations were to notify the other signatory powers, and the claim to territory was to be recognized only when effective occupation had taken place. The "civilized" nations, having thus made their rules, proceeded to lay claim to as much of the spoil as possible. Since effective occupation of vast regions was impracticable, the device of declaring *spheres of influence* was adopted. This enabled the Powers to acquire large areas which could await exploitation at a time convenient to themselves.

METHODS OF ACQUISITION AND EXPLOITATION

Before the Conference closed, a group of Young Germans, headed by Karl Peters, the explorer, landed on the east coast of Africa opposite Zanzibar. Fear of opposition from the British led them to take the greatest precautions to prevent their real object from being revealed. They set about getting large concessions from native chiefs and the surrender of sovereign rights over their dominions. Of their technique, Leonard Woolf writes as follows:

"Fortunately Peters himself has given us an obviously truthful account of the methods adopted for obtaining the treaties. The procedure was as follows. Before arriving at the village of a chief ruler, Peters sent ahead a messenger with presents and a request for permission to camp at the village Having arrived, he then sent an invitation to the chief to dine with him. During dinner the chief was plied with drink and after dinner with more presents. Then Peters asked him whether he would sign a document recording his friendship with the German Empire. The chief could hardly refuse Dr. Juhlke then read out a document, written in German and therefore unintelligible to the chief. The African signed his name and Germany had acquired a new 'Protectorate' Dr Peters shook his victim heartily by the hand, ran up the German flag, and fired a salute More drink followed, and sometimes in honour of the occasion Dr. Peters and the Sultan took a bath together. The expedition then hurried off to perform the same ceremony with some other sultan"

Armed with his treaties, Peters returned to Berlin Almost immediately the German Government granted a charter to the *Gesellschaft für deutsche Kolonisation* In accordance with the Berlin Agreement of 1884, the other powers were notified that the German company had acquired territories and sovereign rights in East Africa and that "on their petition to the Emperor an Imperial Warrant or Charter of Protection had been granted to them" The Sultan of Zanzibar, who claimed sovereignty over this area, protested without effect Meantime British traders had been at work in the same

area, negotiating treaties with native chiefs and pegging out claims to territory. The real threat to the German plan, therefore, came not from the opposition of the Sultan of Zanzibar, but from commercial interests in London, where, according to Lord Granville, Foreign Secretary, there was a scheme

"of some prominent British capitalists . . . for a British Settlement in the country between the coast and the lakes, which are the source of the White Nile, and for its connection with the coast by a railway"

It was suggested that Germany and Britain should negotiate about the demarcation of their respective spheres of influence. The prominent British capitalists in the passage cited were members of the British East African Association, which had been formed immediately news reached London of the operation of a German Association, later the German East African Company. It received official sanction when it received a charter creating it the Imperial British East Africa Company. Its leading member was Sir William MacKinnon, Chairman of the British East India Steam Navigation Company, later interested in railway building on the Belgian Congo. The Company was authorized to administer and exploit the territories for which it had obtained concessions, whether from the Sultan of Zanzibar or chiefs of tribes, "with a view of promoting trade, commerce and good government." Almost at once it found itself in possession of about 200,000 square miles of territory and a population of roughly 4m Africans. The British Company proceeded in the same way as the German. Territory was acquired by treaties with native chiefs. The following is an example:

Treaty No. 63

Done in Arabic and English

"M'Boli, Chief of Ivati, Ukambani, hereby declares that he has placed himself and all his territories, countries, peoples, and subjects under the protection, rule, and government of the Imperial British East Africa Company, and has ceded to the said Company all his sovereign rights and rights of Government over all his territories, countries, peoples and subjects, in consideration of the said Company granting the protection of the said Company to him, his territories, countries, peoples and subjects, and extending to them the benefit of the rule and Government of the said Company. And he undertakes to hoist and recognize the flag of the said Company.

As witness his hand at Ivati, this 4th day of August, 1889. (Quoted Woolf, 239.)

So eager was the Company to secure large possessions that they neglected the opening up of the territories already acquired. Anxious to forestall the Germans, they advanced into Uganda and took possession of it by military force. In 1895 it was forced to resign its charter. East Africa and Uganda then became British Protectorates. Thus the Empire acquired a large and important territory, bounded by the Congo State on the west, by Abyssinia and the Sudan on the north. Thereby it gained control over the source of the Nile in the Victoria Lake.

The system of granting extensive privileges to chartered companies was a reversion to the practice of the sixteenth and seventeenth centuries Its political consequences were most dramatic in South Africa Diamonds had been responsible for the first rush of immigrants and capital The flow of fortune hunters started with their discovery at Kimberley about 1870. In November 1871, Cecil Rhodes, then aged eighteen, arrived at the diggings, "in a Scotch cart drawn by a team of oxen, carrying with him a bucket and spade, several volumes of the classics and a Greek Lexicon." He was an astute young salesman; and he prospered. Eventually he secured a controlling interest in the new fields, when he and his partners founded the De Beers Mining Company in 1880 with a capital of £200,000 to buy up all conflicting interests in De Beers Mine The Company expanded at an extraordinary pace, absorbing one concern after another. By March 1885 it had a capital of £841,550 Two years later, it had secured complete control of the mine; and its capital rose to £2,000,000. For a time its great rival was the Kimberley Diamond Company, controlled by the Barnato interests. Founded in 1880, it extended its control by a steady process of amalgamation until 1888, when it possessed the whole of the valuable Kimberley Mine. Its capital then stood at £1,748,196. Rhodes determined to bring this gigantic concern also under his control. In 1888 his object was achieved with the registration of the De Beers Consolidated Mines, Ltd. This combine then proceeded to squeeze out smaller rivals in other mines, and became a gigantic monopoly of diamond production *

In the year he founded the De Beers Company Rhodes entered politics as member for Berkley West near Kimberley. Determined to use his political power "to obtain the balance of unclaimed country for the British Empire," he measured political success in the scales of territories and profits. He extracted concessions from native chiefs and obtained their signatures or crosses to treaties giving him complete power over their lands. "The railway will be my right hand and the telegraph my speech and my voice," he declared. Ultimately the railway would link the Cape to Cairo, but the immediate object was to extend the control of South Africa to the Zambesi and beyond. To attain this object, Rhodes was prepared to use any method. His grandiose schemes received a setback in 1887, when the Portuguese published a map showing the junction of their East and West African possessions, thus claiming for themselves a complete block of land stretching across Africa. The British government protested and the claim was withdrawn, but the Portuguese, as well as the Boers, continued to work for concessions in Matabeleland to the north of the Transvaal Lobengula, the native king, was inundated with concession-hunters. Rhodes was determined to forestall them all. With the aid of the Rev. J. S. Moffat, C.M G., then resident in Bulawayo, he secured from Lobengula an option on his territory. The Treaty was as follows:

"The Chief Lo Bengula, Ruler of the tribe known as the Amandebele together with the Mashuna and Makalaka tributaries of the same, hereby agrees to the following articles and conditions .

* See *Capital Investment in Africa*, by S. Herbert Frankel, Oxford, 1936, pp. 60–4

"That peace and amity shall continue for ever between Her Britannic Majesty, Her subjects, and the Amandebele people, and the contracting Chief, Lo Bengula, engages to use his utmost endeavours to prevent any rupture of the same, to cause the strict observance of his Treaty, and so to carry out the treaty of friendship which was entered into by his late father, the Chief Umsiligaas, with the then Governor of the Cape of Good Hope in the year of our Lord 1836.

"It is hereby further agreed by Lo Bengula, Chief in and over the Amandebele country, with the dependencies as aforesaid, on behalf of himself and people, that he will refrain from entering into any correspondence or treaty with any Foreign State or Power to sell, alienate or cede or permit or countenance any sale, alienation or cession of the whole or any part of the said Amandebele country under his chieftainship, or upon any other subject without the previous knowledge and sanction of Her Majesty's High Commissioner for South Africa.

In faith of which, I, Lo Bengula, on my part have hereto set my hand at Gubulawayo, Amandebeleland, this 11th day of February, and of Her Majesty's reign the 51st.

Lo Bengula, his X mark
Witnesses: W. Graham
G. B. van Wyk
Before me J. S. Moffat,
Assistant Commissioner (quoted Macdonald, *Rhodes*, 87).

The designs of the concessions-hunters were beyond the comprehension of the native chiefs, whose institutions and tribal rights meant nothing at all to the white man. Afraid that Lobengula would make over important rights to other interests, Rhodes sent a special commission to him in October 1888 to secure the concession of mineral rights. After much persuasion and the handing over of gifts, Lobengula granted the mineral rights throughout his lands, in return for the sum of £100 sterling to be paid each month, 1,000 rifles and 100,000 rounds of ammunition and an armed steamer on the Zambesi. This was the famous *Rudd concession*. Meantime Rhodes hurried to London to secure a charter for the company he was planning. Rival undertakings were absorbed and in 1889 the British South Africa Company was incorporated. It had the grant of amazing powers over a huge territory not precisely defined. The Company was authorized

"to acquire by any concession, agreement, grant or treaty, all or any rights, interests, authorities, jurisdiction, and powers of any kind or nature whatever, including powers necessary for the purpose of government and the preservation of public order" (Buell, *The Native Problem in Africa*, 1928, i, 206)

For some years Lobengula was recognized as an independent ruler, and the British officials merely exercised authority over their own nationals; but as the Chartered Company proceeded to bring in white settlers it aroused the hostility of the natives, who now realized this meant loss of their lands. Suspicious of the British, and in particular of the good faith of Rhodes, who proceeded to occupy the lands with a display of military force, Lobengula granted rights to another concession hunter, by name, Lippert. Determined

to checkmate this attempt to play one group off against another, Rhodes proceeded to acquire the Lippert concessions. This was a *fait accompli* by May 1892 Events were moving swiftly to a crisis The Chartered Company which had inspired such great hopes was in difficulties. The venture was not turning out so profitably as London shareholders hoped. Investors were restive. Resentment of the natives was growing. Hostilities broke out in October 1893. Within a month Rhodes was in Bulawayo and Lobengula was in flight. In the following year the Company took over the complete government of the country and appointed an Administrator and Council of four members. Another revolt two years later convinced the home government that a commercial company could not handle the situation with an acceptable similitude of humanity and justice, despite a clause in their charter ostensibly to safeguard native rights. In 1898 a resident commissioner, representing the British Government, was therefore appointed and given power to deal with native affairs. This official was subordinate to the Company Administrator. In effect the latter was Governor, assisted by a Legislative Council having nominated and elected members.

Such was still the form of government in what came to be called Southern Rhodesia till 1923. The Company went on with its business activities By floating subsidiary concerns and by securing assistance from the Cape Government, it carried a railway from Kimberley to Bulawayo, which it reached in 1897 It started cattle ranches and citrus estates It held a monopoly of mining rights Until 1923 capital expenditure was so heavy that no dividend was paid, though the possession of lands, railways and mining rights had made it a powerful and vastly wealthy body. In that year the British Government took over the administration of its territory and agreed to pay £3,750,000 in full discharge of its claims in Southern Rhodesia for administrative deficits The Company was allowed to retain lands it was developing on a commercial basis, as well as all mineral rights. Buell (*The Native Problem in Africa*, I, 218) shows how well the Company came out of the business. "Following this payment," he says, "the assets

of the British South Africa Company stood at 7,065,000 pounds In addition it possesses 1,732,053 Rhodesia Railway Trust shares at one pound each upon which a dividend of four per cent is paid. It also owns mineral rights which yielded a net income in the year ending March 31, 1922, of 129,000 pounds. Finally, it possesses land amounting to 10,195,000 acres. Of this, more than four million are in Southern Rhodesia, about 2,766,000 are in Northern Rhodesia, and about 2,500,000 are in Nyasaland. Likewise the Company receives half of the revenue derived from future sales of land in North-western Rhodesia for forty years. The Company also holds nearly seven hundred thousand acres in Bechuanaland. The issued capital of the Company is nearly nine million pounds. It will thus be seen that the liquid assets of the Company amount to about 65 per cent of the issued capital The value of the frozen assets is probably much greater than that of the liquid assets It appears that sooner or later the South Africa Company will realize great profits from its holdings. In fact, the vast holdings of this Company which controls the Rhodesian railways and owns all mining rights, casts a shadow over the future of the country"

The ambition of Rhodes had been to carry British rule right into the heart of Africa Through his efforts the British Government extended the sphere of influence of the Chartered Company in 1891 to include the territory north of the Zambesi as far as the Belgian Congo, where its agents had already been busy making agreements with native chiefs. On the strength of these and of other concessions the Company proceeded to alienate lands, though it is doubtful if it had any authority to do so In 1895 it alienated 10,000 square miles in north-eastern Rhodesia to the North Charterland Exploration Company. In the north-west and central areas it acted on treaties of doubtful legality concluded in 1900 and 1909 with Lewanika, the paramount chief of the Rozi, who gave away rights to deal in lands outside its own territory of Barotseland.

The development of Northern Rhodesia was slow. The Chartered Company and its associates brought the railway to Broken Hill in 1906, but the area of settlement was mainly within a strip of some thirty miles on either side of the railway until 1930. The period of great expansion began with the exploitation of the copper belt in 1929 During 1935 and 1936 Northern Rhodesia produced minerals to the value of £5,229,970 and £6,375,929 In 1923 the Company, which had incurred large deficits in administration, abandoned its claims to reimbursement by the home Government, but retained valuable property in lands, all mineral rights, as well as the right to one-half of the proceeds derived by the Crown from the sale or lease of lands for a period of forty years. In 1924 the territory became a British Protectorate and the rule of the Chartered Company ceased. In 1933, however, the Government of Southern Rhodesia acquired the mineral rights for £2,000,000.

Another company formed to administer a large and important region in Africa was the National African Company, later called the Royal Niger Company The part played by Sir George Taubman Goldie, its founder, may well be compared with that of Cecil Rhodes in South Africa. Through their companies each founded new empires Long before the appearance of Goldie in modern Nigeria, however, the Western Sudan had many and important links with Europe, mainly based on the gold trade. Caravan routes ran northwards and thus the gold of Wangara and Ashanti found its way to Egypt and Europe. There is some evidence that Queen Elizabeth herself entered into diplomatic relations with the Moslem State of North Africa in order to share in the gold trade. In the nineteenth century a German traveller spoke of the gold market of Kano (Nigeria) where Manchester goods found a market * It was at the close of the Victorian era that Goldie and his confederates turned their attention to this area. Their company received its charter in 1886. It acquired the basis of its jurisdiction by the negotiation of 306 treaties with various native chiefs According to Buell, the Emir of Katsina signed a Treaty in the following form:

* Bovill, E. W., *Caravans of the Old Sahara* (International Institute of African Languages and Culture, Oxford, 1933).

"AGREEMENT made on the day of 188 , between the King and Chiefs of and the National African Company (Limited) of London.

We the undersigned King and Chiefs of with a view to the bettering of the condition of our country and people, do this day cede, with all sovereign rights, to the National African Company (Limited) for ever, the whole of our territory extending from

We also agree that all disputes arising between British or foreign traders or neighbouring tribes shall be submitted to the said National African Company (Limited) for settlement

We also understand that the National African Company have sole power to mine, farm, and build in any portion of our territory.

We also give the National African Company the power to exclude all or any foreigners from our country.

In consideration of the foregoing, the said National African Company bind themselves not to interfere with any native laws or customs of the country consistent with the maintenance of order and good government.

The National African Company also agree to pay native owners of land a reasonable amount for any portion they may acquire.

The National African Company also agree to pay the said King and Chiefs the value of per annum."

The opposition of native interests and the fear of a clash with the French led the home government to take over the administration of this territory, including all land and mining rights The Government paid compensation, and agreed to a levy of a royalty on all minerals, half of which would be paid to the Company for a period of 99 years. On January 1, 1900, Northern Nigeria was created a British Protectorate, administered by a High Commissioner, while the southern or coastal region, which had been much longer under British influence, has remained a Crown Colony. It should be noticed, however, that there has been no European settlement in West Africa, because the climate is not suitable for that. This, of course, does not necessarily mean that the climate is unhealthy! The whites who live there are either government officials, missionaries or traders. But they do not settle there.

THE NATIVES AND THE LAND

"In all earlier colonial history," says Lord Hailey (*An African Survey*, 1938, 713), "policy was determined primarily by the physical character and economic possibilities of the territory coming under control rather than by consideration of the rights which might be held by natives; areas held to be suitable for European settlement were everywhere liable to expropriation for that purpose, and those which, for climatic reasons, or because they were already fully occupied by native cultivators, were not so suitable, were liable to be subjected to various systems of control designed to place Europeans in a position to exploit their production It was only at a later stage that the recognition of native rights became a question of policy and even at this stage the acknowledgement of such rights seems to have owed much to economic considerations, such as the possible benefit to the colonial power of encouraging peasant production as compared with plantations or other forms of capitalist enterprise. Only in relatively recent times can native rights in land be said to have been considered on a purely legal basis."

Land policy in Africa has followed different lines of development where there has or has not been a large white settler community. At first in Africa, as in America, the Crown claimed the right to dispose of lands to white settlers, who were allowed to occupy lands regardless of the claims of the natives. In South Africa, the white man advanced by force of arms, driving back the natives and appropriating the lands thus conquered. When, as a consequence of this pressure, certain territories became too congested or too strongly settled to admit of further expropriation, the native reserve system was established This system was first practised on a large scale in Natal, when, in 1846–7, a large area was set aside as native territory and protected from reduction by alienation. In 1864 this area was vested in a Native Trust. On the annexation of Zululand in 1897, provision was made for carrying out a similar policy These and other schemes have provided native reserves amounting in area at the time of the Union to 23½m acres or roughly 7·13 per cent of the total area of the country (Hailey, 721).

After the Boer War, a Native Affairs Commission was appointed to consider the whole problem of native policy in South Africa. Its report is a landmark Hitherto reserves had been considered with some regard for native needs. The object of policy was henceforth segregation of native races, and careful delimitation with that end in view of whatever lands they might occupy or purchase. This was carried into effect in the *Native Land Act* of 1913, drafted to check native purchases in "European" territory and to effect the complete territorial segregation of white and black. The native was forbidden to hold land through payment of rent, but was permitted to live on "European" land, provided he rendered ninety days' service as a labourer to the owner. The *Native African National Congress* protested against this Act as a step towards reducing the native population to serfdom, but a deputation despatched to London achieved nothing. Under the Act, the Beaumont Commission was appointed to recommend what lands should be permanently set aside as native and non-native. A long controversy ensued after the issue of their recommendations. Native claims suffered, and it was not until 1936 that the Native Trust and Land Act was passed. According to Lord Hailey, the effect of this Act will be to make "available" for native occupation about 39m acres or 13 per cent of the area of the Union This is not the same as saying that the native rural population of 5,448,000, as against the European rural population of 696,000, will actually occupy as much as the 13 per cent allocated Nor is there any shortage of land available for cultivation by white men or black in the Union of South Africa. The crux of the matter is that extensive blocks, especially in the Transvaal, belong to large land companies, with a view to mineral exploitation or speculation in real estate values inflated by urbanization.

In the Rhodesias the land problem has also been acute. Down to 1924, the British South Africa Company administered Rhodesia. On the basis of the concessions obtained from Lobengula and other native chiefs it claimed complete sovereignty over the region, and, therefore, full power to dispose of land as it wished The various risings of the Matabele, which were suppressed by military force, were due to the company's alienation of tribal lands. The home government, alive to the dangers to native interests

of company rule, appointed a Land Commission in 1894 to assign to the natives of Matabeleland sufficient land for their occupation. They found that so much land had already been alienated to white settlers that it would be necessary to make provision for the natives far from their original homes. Another Commission, appointed in 1914, created more difficulties than it solved After the first world war there was a growing movement which favoured the separation of areas held by the two races. This view was accepted by the Commission of 1925, and an attempt was made to carry it into effect in the *Land Apportionment Act* of 1930 The Act, however, has only been partially successful, in so far as at present there are still 83 reserves intermixed with European lands. But, says Lord Hailey,

"the main feature of the scheme was the provision for each community of an area into which it can expand by purchase, while neither community can in the future invade the area left for the expansion of the other" (736).

In Southern Rhodesia the area set aside is insufficient for the full development of native interests. Out of a total of 96m acres, 47m are or will be available for European settlement, and 29m for native settlement, while 18m has been left unassigned, though the probability is that a large part of that will be taken up by the natives The main trouble has been the dispossession of natives from lands traditionally regarded by them as their homes, and this has been the experience in Northern Rhodesia as well. In Kenya the land problem has been complicated by geographical circumstances, which divide the territory into what are, from a climatic viewpoint, two entirely distinct regions—the lowlands, with a hot, humid climate unsuited to Europeans, and the higher land, which is regarded as eminently suitable for them. This geographical division does not coincide with the distribution of the native population Some of the most densely populated native districts of Kenya lie in the Highlands Before the declaration of the East Africa Protectorate in 1895, settlers had established themselves in Kenya, either by purchase from the British East Africa Company or from native chiefs, who, it was alleged, often parted with their land in violation of native law or without understanding the nature of the transaction. When the East Africa Company was wound up, the Government assumed complete sovereign rights over all land not so far in private hands It had been in the highland area amounting, roughly, to one-thirteenth of the whole territory, that the problem of land ownership and settlement had been most acute. The dispossession of natives had become so serious that the Government decided, in 1904, to accept the policy of native reserves

In the next few years various areas were demarcated for native occupation, but the interests of the white settlers predominated. The fixing of reserve areas was usually carried out not to serve the interests of the natives, but to exclude them from the favoured high ground which the Europeans wished to monopolize. This was the beginning of a long series of troubles, and the unfortunate policy pursued by the Government gave the natives just cause for the belief that their rights were regarded as secondary to those of the white man. The *Crown Land Ordinance* of 1915 declared that all Crown land, which included "all land occupied by the native tribes of the Pro-

tectorate and all land reserved for the use of the members of any native tribe," could be alienated by the Governor, subject to certain reservations (Buell, I, 306). As late as 1929 the problem of giving the natives some measure of security of tenure was still urgent. In the following year it was declared that the reserves were "set aside for the benefit of the native tribes for ever," and were to be placed under a Native Lands Trust, consisting of government officials and two non-official members of the legislative council, one of whom was to represent native interests This seemed definite enough, but the discovery of gold at Kakamega, in a closely populated native reserve, re-opened the security issue. In 1932 the *Native Lands Trust Amendment Ordinance* permitted the government to exclude land on which minerals had been discovered without providing equivalent land elsewhere, and without reference to the Local Native Council. Thus the Ordinance re-opened the door to mine prospectors and speculators.

In West Africa development has followed different lines. This is due partly to the fact that British penetration had taken place there at a time when the current of humanitarian views was running strong, but still more, perhaps, because the climate has not encouraged extensive colonization. The local problem has not been the displacement of natives by immigrants so much as the regulation of mining and forest concessions. When the charter of the Royal Niger Company was terminated in 1900, the Government did not assert any claim over native lands in Southern Nigeria, though it did recognize the validity of mineral concessions obtained by the Company. By Proclamations of 1900 and 1903, modified by an Ordinance of 1917, it was declared that no alien could acquire any interest in land from a native, except under an instrument approved by the Governor (Hailey, 769). Sales have therefore been very limited and confined mainly to urban areas. Generally speaking the land is cultivated by natives, though there was an attempt by Leverhulme and other important commercial interests to acquire large areas for oil-palm plantations in freehold, after the first world war. This gave rise to considerable uneasiness among the natives, who feared that the Government would adopt the policy known as the "Kenya System."

After inquiry the home government rejected the application, believing that peasant cultivation was preferable to the plantation system, and that even the granting of long leases would have a detrimental effect on native rights. Since then, however, according to Lord Hailey, the United Africa Company has obtained long leases of rubber and oil-palm plantations, and certain timber concessions have also been granted In Northern Nigeria the State assumed "ultimate ownership" of all land in 1910, mainly as a means of checking alienation, and, in point of fact, only a few alienations have been made, chiefly in connection with tin mines On the Gold Coast, and in Ashanti, alienations have been few, and the rights of the native cultivators have been safeguarded. But the rapid adoption of cocoa cultivation within the last forty years has inevitably undermined the primitive agricultural economy, and is tending to put in its place a system approaching private ownership. Nevertheless, the predominant industry remains in the hands of small independent native farmers. The marketing of the crop, however, is largely controlled by a small number of European farmers who,

in 1938, caused considerable resentment among the natives by forming a Buying Agreement. (See *Report on Commission on the Marketing of West African Cocoa*, 1938, Cmd 5845)

THE BOER WAR

In mid-Victorian days British colonial policy drew its inspiration from the humanitarian movement, whose crowning achievement was the emancipation of slaves in 1833. Under the influence of the Quakers and the Methodists, English and Scottish Protestantism had gravitated far from the Calvinistic exclusiveness of its infancy to the acceptance of Wesley's gospel that free grace is for all mankind. During the period of reaction against an aggressive policy of colonial expansion, missionary zeal flourished, and did, in fact, profoundly colour the administration of newly acquired colonies, such as the Cape of Good Hope, where the Boer (Dutch) settlers remained vehemently hostile to the *Exeter Hall*, i e. missionary, viewpoint Rather than submit to the loss of their slaves, they moved bag and baggage into the interior of Africa beyond the Vaal, hoping that they could there pursue their own way of life without interference from the British Between the viewpoint of Briton and Boer there was initially a deep cleavage, but there were signs of reconciliation before the death of Victoria, especially in the Cape, where W P. Schreiner headed a liberal Dutch element These high hopes were suddenly dashed when the Jameson Raid once more opened the floodgates of national animosity and brought Boers in the Cape and in Kruger's Transvaal Republic into line

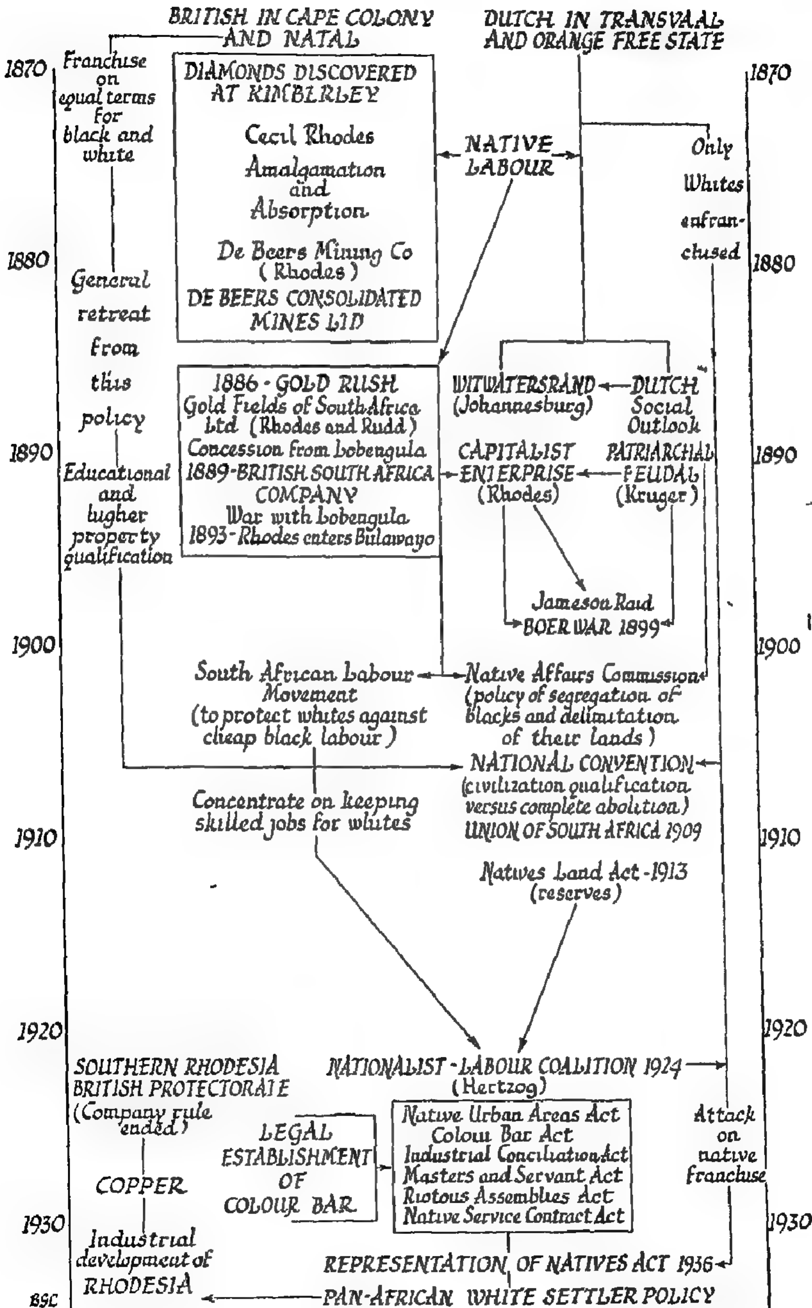
The dominant fact in the new situation was the militant economic imperialism we have discussed already. Starting in a small way, Cecil Rhodes, ruthless in the practice of his imperialist creed and unscrupulous as a concession hunter, had soon acquired control of the diamond industry by floating De Beers Consolidated Mines in 1888 A year later he secured a charter for the British South Africa Company, giving him and his friends extensive rights over a vast undefined territory Rhodes's plan, as we have seen, was to secure development rights to minerals and other resources for his company and, incidentally, to make Britain the dominant power in Africa. In his own mind the two ends were doubtless the same. Natives were dispossessed of their lands in the name of economic progress and recruited for mines, where they would contribute to the greatness of British Africa and to the profits of the Chartered Company (Fig. 86). Firmly entrenched in the Transvaal, the Boers had other views.

Long isolated from Europe and the cultural influences which had swept across the nineteenth century, they stood for the supremacy of their own community and its distinctive social outlook They had trekked into the wilderness away back in the thirties. There they had proclaimed their determination to submit to no interference. They wanted to be alone. In their new home they practised a grimly Calvinistic form of Protestant worship with ideals akin to those of the slave-trading buccaneers who had challenged the might of Spain in the days of Elizabeth. Their Bible was the Old Testament, their God the God of Israel, and, like the people of Israel,

they were driven to wander in the wilderness No less than the people of Israel they were also a chosen people. Like the slave-trading captains who had shattered the power of Spain and the Protestant planters of Virginia, they believed, and believed fervently, that the indigenous population of Africa, being under the curse of Ham, were predestined and foreordained to damnation in the next world and the service of the elect in this. Politically they stood for an effete patriarchal system, economically for a feudalism of their own creation. The distinctive feature of the economy they established in the Transvaal was a "farm" whose circumference might extend to two hundred miles. Safe within its confines the head of the house lived a life at once simple and ample Uninterested in developing natural resources or in amassing wealth, his grand object was to maintain himself and his family in comfort and independence His attitude to natives tallied with his conviction that the Dutch were the elect remnant, the real Afrikanders, whose seed had taken root in the land of their adoption. For the British who kept alive sentimental ties with the homeland, he had nothing but contempt. Secure in the sureness of his own election, the patriarchal Boer had no scruples against dispossessing the Bantu Canaanites; and if his vast estate demanded serf labour, the natives must supply it, in accordance with the precedents of the Old Dispensation.

First and foremost, the British imperialist stood for British supremacy in Africa, but initially at least for westernizing the native and at all times for bringing him within the framework of a new economic system. Measures to provide labour for capitalist expansion could be easily presented in a form to appeal to humanitarian sentiment at home as a means of training the native for ultimate citizenship. Kindly as he might sometimes be to his own personal native servants, the Boer regarded the blacks as an inferior race, useful as serfs but nothing more. In this setting, those whose economic policy conflicted with that of the Afrikander Republics had no difficulty in making their case morally picturesque enough to inspire chivalrous support in the homeland, where their real aims were recognized by few of their contemporaries When their aims were patent to the Boer leaders, the more enlightened Cape Boers at once joined hands with their brethren across the Vaal. A showdown was inevitable. The only possible outcome was the military capitulation of one faction and its moral victory. The Boers succumbed to social competitors with superior technical equipment; but they imposed their own philosophy on those who conquered them

Behind the tangled story one fact of transcendent importance emerges A boom in diamonds had hardly reached its height when the gold rush started in 1886. Unlike diamond hunting, gold mining made large demands on capital and labour So extensive operations were undertaken by capitalist interests. Here, too, Rhodes played a decisive role. In 1887 he and his friend Rudd floated the Gold Fields of South Africa Limited. Meantime numerous other companies were formed. By 1888 there were no less than 315 gold-mining companies with offices in London with a paid-up capital of £44,331,000. The area of exploitation lay astride Johannesburg, the sleepy capital of the Transvaal, and extended about ten miles on either side. This was the Witwatersrand. A medley of cosmopolitan adventurers poured in



TIME CHART 19 · CAPITALIST ENTERPRISE AND RACIAL DISCRIMINATION

to peg out claims in the new El Dorado. Overnight Johannesburg became a vast mining camp (Fig. 87). The Dutch despised the *Uitlanders*, as they called them. They treated them as milch cows, being determined to keep a tight grip on the exploitation of Dutch territory. The British, on the other hand, were equally determined not to be checked in their beneficent work by an archaic administration which declined to accommodate an insatiable demand for labour. Cornish miners who had emigrated in search of gold gambled away their claims at poker, but could still earn fantastically high wages while labour shortage persisted. To their successful playmates a simple solution of the shortage was self-evident. Why not tap the unlimited supply of native labour?

The showdown started when the commander of the militia controlled by the Chartered Company made an unsuccessful effort to force Kruger, then President of the Republic, to fall into line with his demands. Behind the Jameson Raid was a clash of interest between two diametrically opposed social systems, the one conservative, patriarchal and stubborn, the other nakedly aggressive and militant. The protagonists were Kruger, defiant, implacable, redolent of the Old Testament (Fig. 88), and Rhodes, capitalist magnate, chairman of the British South Africa Company, politician and now premier of Cape Colony. Rhodes was an astute politician, in a strong position to exploit fine sentiments about unity between British and Dutch and liberality to natives as a cloak for his ambitions, that is to say, political and economic power for himself and the interests he represented. When his own private war ended in the capture of Jameson during the first few days of 1896, and the subsequent imprisonment of his own partners in business, Rhodes used influence with friends in London, who also believed that right was on the side of capital. At home, the missionary tradition of *Exeter Hall* was still very much alive. It was easy to inflame public sympathy against the Boer policy of excluding native labour from the opportunities offered by western civilization. War came in 1899 and for three sorry years the Homeland used arms and men to fight Rhodes's battle, so destroying hope of reconciling Boer and Briton in South Africa, and giving the *Exeter Hall* policy in the Cape its *coup de grâce*. The Boers were numerically superior, though technically ill-equipped. In 1926, 57 per cent of the European population of the Union was Dutch and only 34 per cent British. Ever since the Boer War, the Dutch way of life has coloured the political and social outlook of South Africa, which became a Dominion with full self-government—for the whites—in 1909.

The Boer War marks a turning-point in the Homeland attitude to natives. Till then humanitarian sentiment had been vigorous and public policy had been formulated with reference to native needs. Following the *Native Affairs Commission*, appointed after the Boer War, administration has been directed to segregation of natives and delimitation of the lands they may occupy or purchase, in accordance with the traditional viewpoint of the Boers. We have seen how this land policy was implemented in the *Native Land Act* of 1913. The effect of the latter was to deprive the Bantu of land which their growing numbers made essential for existence. In short, the Bantu were, as Barnes puts it, "the victims of a common swindle." Hundreds of

natives swarmed into the towns, providing cheap labour for capitalist enterprise and piling up social problems which the Afrikander was neither able nor willing to solve. An appalling growth of slums and concomitant social diseases of urbanization became everywhere apparent. Inescapably, flooding of the labour market with cheap manpower aroused keen hostility between black and white.

After the Treaty of Vereeniging which concluded the War, Colonel Creswell and his associates founded the South Africa Labour movement to protect white miners against competition with underpaid native labour. Had the policy of preventing importation of native labour from Portuguese East Africa and Orientals from the Far East worked, it would have justified itself, as has the Australian White Labour policy But a war which was the most piquant incident of economic imperialism had not been fought for nothing. Inevitably Creswell's men were forced on the downward path of compromise. Not being strong enough to exclude incomers in general, they concentrated on keeping *skilled* labour for whites. This brought them into line with the policy of the Afrikander; and when they put forward a programme based on the segregation of European and native labour in 1912, there was little difference between their own political philosophy and that of the Dutch. It assumed the permanent maintenance of the white population in a position of economic and political supremacy, and the preservation of their standards by reducing possible contact of white and black to a minimum. The Native Land Act of 1913 thus secured equal support from the Afrikander bourgeois or farmer on the one hand and white labour on the other. This rapprochement between Afrikander nationalism and the white Trade Unions had already led to the Nationalist-Labour coalition in 1924, under the leadership of Hertzog.

THE POLICY OF SEGREGATION, SOCIAL, ECONOMIC AND POLITICAL

Hertzog's policy was in the tradition of Krugerism He stood for supremacy of the Afrikander. Since the descendants of the Dutch considerably outnumbered all other whites, this, in effect, meant the supremacy of the Dutch. It was therefore essentially anti-British. The Hertzog policy moved to its final accomplishment in the legal establishment of the colour bar, in disfranchisement of the native, prohibition of mixed marriages, in short, complete abandonment of the Cape tradition which had sought to prepare the native for citizenship. The official creed of the Union rehabilitated Boer Calvinism as a quasi-biological ideology, of which the Nazi race doctrine has been a half-hearted imitation

The first fruit of this policy was the Native Urban Areas Act. Passed in 1923, it was designed to segregate natives from Europeans within urban areas and to control movement of natives into them. Four years later the Native Administration Act gave government the extraordinary power to alter tribal boundaries, divide tribes and order their removal from one place to another. In the economic sphere the policy of "civilized labour" involved creation of a caste system whereby whites were to be foremen and skilled workers, and blacks unskilled The Hertzog government then proceeded

to replace blacks by whites in the public services At the same time they encouraged or bribed private employers to pursue the same policy. The notorious *Colour Bar Act* of 1926 gave legislative effect to practices already existent in the mines The government was authorized to issue certificates of competency in certain occupations only to Europeans and to certain classes of "coloured persons" (i e. not native). In occupations not covered by the Act the policy was applied unofficially by the white trade union movement, which restricted skilled jobs to its own members. Through the apprenticeship system it lays down standards which make it virtually impossible for natives to qualify. The colour bar is also reinforced by laws relating to combination For instance, the *Industrial Conciliation Act* excludes natives from its benefits. While Europeans are permitted to strike after giving statutory notice, the *Masters and Servants Act* makes it an offence for natives to terminate contract. Not only so, a subsequent law (the *Native Service Contract Act*, 1932) permits corporal punishment of male servants up to eighteen years of age for any contravention of the Masters and Servants Acts. By the *Riotous Assemblies Act* of 1930, persons interested in organizing unions of native labour can be removed; and *pass-law* regulations (p. 469) can be used to forbid them access to natives in the reserves.

Taken together, these Acts give legislative sanction to a policy of race discrimination without parallel in modern history Their collective effect extends farther than anything attempted by the Nazi regime. The white population is the master race and the natives are the hewers of wood and drawers of water. Every avenue to political and economic advancement is closed to them. Economically it has resulted in the degradation of native labour, which sees no hope of improvement within the economic system, and it has given white labour high wages and a monopoly of skilled work reflected in wage rates. While the average ratio of skilled to unskilled wages is estimated at 7 to 5 in Europe in the building and engineering trades, the ratio is 5 to 1 for secondary industries in South Africa, and 7 to 1 in mines. In 1925 the average wage per annum in manufacturing industry was £248 for whites and for natives £48 The Report of the Federated Chamber of Industries in 1925 makes this statement

> "The relatively high wages of white artisans are due to, and dependent on, the employment of large numbers of unskilled native labourers; and in this the artisan is typical of the whole white community, who are enabled to maintain a standard of life approximating rather to that of America than to that of Europe, in a country that is poorer than most of the countries of western Europe, solely because they have at their disposal these masses of docile, low-paid native labourers"

In effect, white labour thus receives a gigantic dole from the black man. While this is so, the interests of white and black are diametrically opposed. Any rise in black wages, it is imagined, must be offset by a fall in white wages. So the white trade unions fight to the death to keep black wages down. Following the practices of a "superior race," the blacks have now taken to trade union activity. In 1912 they founded the *Industrial Coloured Union* Despite legislative barriers, it has continued to extend. A day of reckoning will assuredly

come. But economics is not the whole story. Natives have been disfranchised because the whites fear the numerical superiority of the blacks. In 1936 the European population was 2,003,512, the non-European, 7,585,153, of which about 6½m are natives. This again is a complete reversal of the policy accepted last century. The constitution granted to Cape Colony in 1853 extended the franchise on equal terms to all male British subjects, on the ground that "all Her Majesty's subjects without distinction of class or colour, shall be united by one bond of loyalty and a common interest."

Before the death of Victoria a general retreat from this policy was already in full swing. Annexation had greatly increased the territory of the colony A swamping of the electorate by the native vote seemed inevitable. In 1892 an educational qualification was introduced to exclude "blanket Kaffirs"; and the property qualification was stiffened up. When Natal, which had been a Boer republic from 1839 to 1845, came under British control, representative government (1856) and later responsible government (1893), were established, but the high property qualification virtually excluded natives from the franchise. In the Boer Republics of the Transvaal and Orange Free State, only whites were enfranchised Though there was rapprochement between Dutch and British viewpoints before the Boer War began, there was still a fundamental difference. Ostensibly the British view was that when natives were sufficiently educated, they would share the vote on equal terms with whites; and so far as it went, this view was reasonable enough, provided everything was done in the interim to equip the native to achieve full citizenship through education The Dutch view outside the Cape was essentially different, in so far as it excluded natives from the franchise, as an inferior race.

After the Boer War the native vote occupied the attention of a *Native Affairs Commission*, appointed in 1903. This pointed out that there were 8,117 registered native voters in the Cape out of a total electorate of 135,168 In 7 out of 46 constituencies the native vote was then predominant Feeling that the organized native vote was "an unwise and dangerous thing," the commissioners proposed the creation in each colony of separate constituencies for blacks and whites. This led to no action The matter was reviewed when a National Convention sat in 1908–9 to draft the constitution for the Union. The Cape delegation, of Dutch as well as British stock, proposed to maintain the native vote, subject to a "civilization qualification." The white settlers of the other colonies pressed for complete abolition. The upshot was a decision in favour of the *status quo*. If the Cape delegates did not bring the Boers to their point of view, they at least safeguarded their own native franchise, and a clause inserted in the South Africa Act, which gave the Union dominion status in 1909, declared that it could not be modified, except by a two-thirds majority of both houses sitting together, but the right of native and coloured persons to sit in the Cape Parliament was now withdrawn.

The creation of the Hertzog National-Labour Coalition in 1924 inevitably precipitated an all-out attack on the native franchise. In Natal it had already been reduced to impotence. In fact, no more than three natives had ever satisfied the registration qualification. The attempt to abolish the Cape native franchise failed again; but the number of qualified native voters

now was small, in 1927 no more than 16,480 out of a native population of about 1¾m. In subsequent years it has been reduced by strict application of qualifying tests, so that by 1933 it represented 2·7 per cent of the Cape electorate and 1·2 per cent of the Union Electorate.

By this time racial discrimination had gone so far that a fresh attack on native franchise was inevitable. In 1936 a *Representation of Natives Act* provided for two forms of representation. In the first place, four additional seats were created in the Senate to be filled by Europeans elected by natives, and in the second place, a Native Representation Council was created consisting of 22 members, 12 elected and 4 nominated native members, with the Secretary for Native Affairs as chairman and the 5 Chief Native Commissioners as assessors. Its functions are purely advisory. As originally intended, the Act would have completely abolished the Cape native franchise In the end compromise was effected. The franchise was retained and provision was made for separate election by Cape native voters of three members of the House of Assembly and two members of the provincial council, additional to the existing members. Lord Hailey thus sums up the position:

"The primary interest of a large number of the European voters undoubtedly lay in the abolition of the Cape franchise, and in the permanent exclusion of natives from any share in the Parliamentary electorate. Many accepted the Natives Representative Council as an institution which, since it did not trench in any way on the European field, might at least be viewed as innocuous, though there were at the same time some who were opposed to granting natives for the first time a statutory right to combine in an expression of their opinions, or in a discussion of their relations with Europeans It was perhaps only a minority which believed that the council would form an effective means of securing for the native an improvement in his social and material conditions"

In this way the policy of segregation extended from the economic to the political field. Provisional limitation of the native franchise might be justified on grounds of education, but the purpose of segregation is not to prepare the native for full political rights. The aim of Hertzog's supporters has been to exclude the native permanently from political freedom. Their cry is Africa for the Afrikander; and the implications of their policy extend far beyond the Dominion to a federation of White Settler States, with or without nominal allegiance to the British crown. The fact that Hertzog's more intransigeant separatists have made way for men with more ostensibly moderate views signifies little so far as concerns the future of the native population Within the framework of formal allegiance, the moderates, led by General Smuts, envisage a pan-African White Settler policy, condoned by Whitehall under the joint pressure of the leading partners, that is to say, Kenya, the Rhodesias and South Africa itself. Meanwhile the Acts already retailed do not exhaust the scope of South African racial policy, just as the decrees of Hitler did not comprehend the complete workings of the Nazi system. They are enforced by social conventions which make the lot of natives intolerable. The cruelties inflicted by white men on natives, the injustices meted out to them in courts presided over by Afrikanders, the social taboos everywhere enforced are a sorry commentary on the hopes which motivated

the entry of South Africa into the war against a regime with which it has such close moral kinship

EDUCATION

Restriction of the native franchise in South Africa could have been justified as a temporary measure if it had gone hand in hand with a policy of government subsidized primary education. In 1934 the total number of state and state-aided schools for natives in South Africa was 3,133, of which 1,686 were in the Cape. The enrolment was 324,649 "It appears," says Lord Hailey, "that over 70 per cent of the native population of school age are receiving no education Of those who do go to school, 57 per cent are in the sub-standards, only 2·4 per cent in Standard VI, and less than 2 per cent in secondary and higher institutions The corresponding figures for the European population are 18 per cent in the sub-standards, 10 per cent in Standard VI, 16 5 per cent in secondary and higher education. Of the total native population, one in every 1,000 receives secondary and higher education; of the European, thirty in every 1,000." Technically the Universities are open to natives, but in practice they are closed. The only higher education open to the Bantu is what the missionaries provide in their college at Fort Hare in Cape Province.

TRUSTEESHIP

In no part of the Empire has the need for capital been more urgent than in Africa. The native population is poor and has an extremely low standard of living. So it has little to offer in exchange for the manufactured goods of Europe For centuries, therefore, the slave trade was the main preoccupation of the white man Not until the close of the last century did the progress of industrialism at home demand new fields for capital investment. Once more Europeans renewed their interest in Africa. Unable and unwilling to take the risk of exploiting the territories that were coming under its control, the British Government granted charters to large monopolies, such as the Chartered Company of South Africa and the Royal East African Company The task facing these undertakings was gigantic. They prospected for minerals, started mines, established plant and offices with warehouses They had also to build roads, bridges, railways and towns, creating services normally provided at home by local authorities

Such dependence of vast regions on capital enterprise whose sole object is profit was socially unhealthy. We have seen how local politics were dominated by great commercial interests, and within the framework of capitalist civilization this was an inevitable condition of African development in the interests of the European. For Africa of itself had no goods to offer. Without capital its mineral resources, the chief material asset of the continent, could not be tapped. The importance of minerals in the economic system of Africa is evident from figures of exports. In 1935, gold (46·7 per cent), diamonds (3·3 per cent) and copper (3 5 per cent) together accounted for 53 5 per cent of the total domestic exports of the continent. In some parts, such as Southern Rhodesia, minerals account for about

75 per cent, in Northern Rhodesia, roughly 96 per cent. Figures of capital investment tell the same story. Between 1870 and 1936, £941m had been invested in British territories in Africa, and of this amount £657m had gone to South Africa and the Rhodesias, the largest part being invested in mines and railways.

Gold mining attracted a large proportion of the capital invested in Africa. Though the existence of gold had been known for many years, it was not until the beginning of reef-mining on the Witwatersrand in 1886 that extensive operations were undertaken by capitalist interests For a time many small companies and partnerships engaged in this new and highly-speculative industry. The boom of 1889 led to the creation of many mining, finance, exploration and land-owning companies. In 1880 there were 396 such companies operating in South Africa, in 1889 the number rose steeply to 642. The number of companies with offices in London increased from 145 in 1888, with a nominal capital of £23,206,000 and a paid-up capital of £15,846,000, to 315, with a nominal capital of £56,565,000 and a paid-up capital of £44,331,000. Very soon it was realized, however, that amalgamation and rationalization were essential to an industry making such heavy demands on capital and labour. The process of unification has gone on steadily until to-day (Fig. 89) Down to 1932 the Rand had absorbed some £200m of capital, of which roughly £120m came from abroad. During the same period the value of its product amounted to £1,145m and the dividends distributed, including the return of capital in the form of liquidation dividends, to £255m Down to 1932 about 75 per cent of the dividends distributed by the gold-mining companies went to investors residing abroad *

Investment of capital in railways and mines and other productive enterprise assists in the economic development of the country which receives the capital; but it is false to measure progress of a colony by how much capital it absorbs or by the amount of goods it exports. Such tests, customary to those brought up in industrial countries, may give a completely erroneous impression of real social progress. The output of copper in Rhodesia, all of it sold outside the colony, was valued at some £12m in 1937. One might conclude that this would return to the people in imports of goods they needed for themselves. In reality, £5m went in dividends to non-resident shareholders, £500,000 in royalties to the British South Africa Company, which had secured a monopoly of mineral rights in the colony forty years before from the native King of Barotse, £800,000 in salaries to 1,690 Europeans. Thus only £244,000 went in wages to 17,000 natives.

The end of the European War of 1914–18 marks the beginning of a phase of colonial policy with emphasis on our role as "*trustees*" for the ex-enemy colonies handed over to the victorious powers, on a mandate from the League of Nations. The mandatory powers undertook to promote the moral and material welfare of the native people. "The Mandate System," says Lord Lugard (*The Dual Mandate in British Tropical Africa*, 1929, 53),

> "is a new departure in international law and policy, in that it confers sovereignty under definite obligations, for the fulfilment of which the Mandatory is responsible to a constituted authority"

* Frankel, *Capital Investment in Africa*, Tables 28, 49, 51, pp. 77–105.

Acceptance of the new principle by no means meant abandonment of the view that colonies are to be developed in the interests of the European powers. Lord Lugard has elaborated the now familiar idea of a Dual Mandate in the book cited above·

"The tropics are the heritage of mankind, and neither, on the one hand, has the Suzerain Power a right to their exclusive exploitation nor, on the other hand, have the races which inhabit them a right to deny their bounties to those who need them. The responsibility for adequate development rests on the custodian on behalf of civilisation" (p. 61). Or again he writes, "Let it be admitted at the outset that European brains, capital, and energy have not been, and never will be, expended in developing the resources of Africa from motives of pure philanthropy; that Europe is in Africa for the mutual benefit of her own industrial classes, and of the native races in their progress to a higher plane, that the benefit can be made reciprocal, and that it is the aim and desire of civilised administration to fulfil this dual mandate" (p 617).

The dual mandate so conceived was not sufficiently flexible to meet the views of the Herrenvolk of South Africa and Southern Rhodesia, where the white settler is secure in his own self-appointed trusteeship Accordingly, a recent Commission (1925) on British East Africa, reported that the government of these territories should be regarded as a *three*fold trusteeship:

"First, for the moral and material development of the native inhabitants

Secondly, for humanity as a whole (the duty here being to develop the vast economic resources of these territories for the benefit of the whole world)

Thirdly, for the immigrant communities, whose initiative, knowledge, and material resources are necessary instruments in the fulfilment of the first two tasks"

(East Africa Commission, Cmd. 2387, of 1925, quoted *The Colonial Problem*, 115).

The difficulty of carrying such a policy into effect is obvious. In a 1923 Government White Paper we read:

"In the administration of Kenya His Majesty's Government regard themselves as exercising a trust on behalf of the African population, and they are unable to delegate or share this trust, the object of which may be defined as the protection and advancement of the native races."

Elsewhere it says:

"Primarily Kenya is an African Territory, and his Majesty's Government think it necessary definitely to record their considered opinion that the interests of the African natives must be paramount, and that if, and when, those interests and the interests of the immigrant races should conflict, the former should prevail"

These statements seem clear enough, but it is difficult to define "paramountcy," for as the Hilton Young Commission recorded,

"It is in practice almost inevitable that the advent of European civilization should create, if not a conflict, at least a duality of interests between the Europeans and the natives . . . it is useless to ignore the fact that this contact (with white civilization) raises practical problems of the greatest difficulty, and that the two communities in pursuit of what they regard as their particular or immediate interests, may frequently find themselves at variance" (See Report of Joint Committee on Closer Union in East Africa, 1931.)

Leonard Barnes (*The Duty of Empire* 154), who has critically examined the Dual Mandate doctrine, writes:

"The doctrine is dangerous as well as hypocritical. As a guide to our relations with primitive races it is crudely fallacious. The 'right to exploit Africa,' however you hedge it round with qualifications and restrictions about the welfare of the natives, has this unwarrantable implication. It means that the industrial nations may without qualms of conscience impose their acquisitive philosophy, their belief that the meat is more than the life, on great masses of adolescent peoples to whose instinct and unawakened powers it may be wholly repugnant. They may revolutionize traditional society and subvert established institutions in backward countries, simply in order that 'civilization' may hasten or maintain its rate of movement along the road of material 'progress.' They may infect the primitives, in whom seethes a fund of malleable untested life, with what Mr. T. S Eliot calls 'the living death of modern material civilization' for the sake of making them integral parts of the industrial systems of the west. This subordination of the cultural aspect of the question to the economic seems a serious weakness in the general British outlook on colonial affairs. It often sinks, indeed, into the bare prejudice that native welfare is synonymous with maximum economic production, provided only that the distribution of the return is a fair one as between natives and immigrants."

The policy of the Dual Mandate appeals to the average citizens of the Homeland as common sense. The colonies will take our manufactured goods and we shall get raw materials in return. We shall establish law and order among the native peoples and mould them in the pattern of the white man. They will get modern medicine and movies, sanitation and schools, cheap transport and gramophones. Unfortunately the average citizen has better reason for appreciating the gains from this arrangement than have the people of the African continent.

If the principle of trusteeship is more than a pious formula, it should force us to ask how far the standard of life of the native in our colonies has risen as a result of our stewardship. How far have we really helped the natives to adapt themselves to the changing world which we have brought to their doors? Have we given lavishly of our scientific and medical knowledge to these adolescent peoples for whom we have accepted responsibility?

Production figures which increase, or exports which rise, do not furnish satisfactory answers to these questions. Experts are unanimous in declaring that the standard of living is extremely low in Africa, as in India or the West Indies, as, in fact, wherever there are native people. Lord Hailey writes.

"It has already been stated that Africa supports a relatively small population at a low subsistence level. As might be expected, this fact is closely linked with the physical condition of the people, the problem of health is, indeed in a great measure, the problem of subsistence."

From the pioneering days of Livingstone about 100 years ago, public attention was mainly directed to such major diseases as leprosy, malaria and sleeping sickness. Only within recent years has the importance of malnutrition *vis-à-vis* resistance to the epidemic diseases been realized. Everywhere there is evidence of the close relationship between the two. Reporting on labour conditions in Northern Rhodesia, G. St. J. Orde Browne, Labour Adviser to the Colonial Office, says:

"Considering now the actual conditions of life in the village two sinister elements are conspicuous—under-nourishment and disease. The view is occasionally expressed that the native is well and happy in his own surroundings and that it is a mistake to introduce him to modern ideas as to sanitation, diet, and so forth. Even a superficial investigation of conditions will show this to be a disastrous fallacy; birth rate, infant mortality, physique, and general health all indicate a population subjected to a perpetual drain only partially offset by sun, fresh air, and the African's natural vitality" (quoted Barnes, *Empire or Democracy*, 1939, 147).

Industrialism has accentuated the problem. By throwing large numbers of people together who hitherto lived in isolated groups, it has increased the risks of infection and raised new problems of health. Malnutrition, overcrowding, insanitary conditions are mainly responsible for disease and premature death Throughout our colonies infant mortality rate is appallingly high. There are, of course, no reliable statistics, but in Kenya it has been placed at 400 per 1,000, in Northern Uganda at 356 5, and in Nigeria at 300. In the United Kingdom the corresponding figure is 65. Throughout our colonies tuberculosis is rampant, especially in overcrowded urban areas; and it was not a widespread disease until industrialism threw large numbers of people together, so facilitating the spread of other diseases, especially hookworm infestation, now estimated to affect over 90 per cent of the population of East Africa. A low standard of living in Africa is partly due to inefficient methods of food production and, more particularly, to the low wages paid to natives. The situation has been aggravated by concentration of natives within limited reserves and by withdrawal of men to work as wage-earners in mines and plantations. Native cultivators suffer by their removal to industrial employment, where they are brought into a new and unusual environment which lowers still further resistance to disease associated with urbanization and overcrowding.

The solution of these problems of nutrition and health is certainly not to be found in leaving indigenous populations to follow traditional ways of living. If European civilization has things to offer them, one is surely how to produce food by more efficient methods and another is how to live more hygenically. We have failed lamentably in discharging these responsibilities which lie within our competence and would be to the untold benefit of the peoples of Africa. In the African Survey published in 1938, we read:

"In the Union of South Africa and in the High Commission Territories, however, where maize porridge is the main diet of the native people, it is grown continuously on the same land in all native areas whether the soil is suitable or not, usually without any attempt at rotation with a legume or root crop, and, as may be expected, the return is low and production is frequently insufficient to meet food requirements. In these conditions the average output would seem to be roughly 2½ to 3 bags an acre, as against the 6 or 7 which similar land might yield under improved methods of cultivation" (891).

Figures of copper output, of tobacco or cotton production, of exports and imports, do not reveal these conditions. They do not tell us that capitalist production is slowly in some places and swiftly in others disrupting the social life of the tribe without putting anything adequate in its place. That is the tragedy of the present position. Torn from his ancient environment, the native who finds work in towns falls a ready victim to all the social diseases of urban life and industry The society of which he was a member is disintegrated before his eyes. His new environment is a house divided against itself, with classes whose interests are in fundamental opposition to one another. So he stands helplessly and bewildered in a no-man's-land between his old folkways and the new industrialism (Fig. 90).

For this we might condone ourselves, if the process of detribalization had gone hand in hand with a vigorous education policy Nowhere in Africa is this so. As yet we have done little to help the African to adapt himself to his rapidly changing environment or to pass on to him and his children the fruits of our civilization The early mission schools, which rendered splendid service of a kind, were primarily designed to secure converts to Christianity, and where state-aided education has superseded them it is largely conducted on an assumption of the superiority of the white man. Not more than 20 per cent of the native children in any tropical African colony receive schooling of any kind. Nigeria and Sierra Leone are well below the average. About 8 per cent of the native children go to school in Sierra Leone, and of these only 12·5 per cent reach Standard I In Southern Rhodesia only 6 2 per cent reach Standard I. In the Transvaal, 62 per cent of the small minority enrolled never emerge from the preliminary sub-standards In short, the native is to receive the education and training which befits an unskilled labourer, this being the lowly lot assigned to him by the white settler. "In only a few areas," says Lord Hailey,

"do more than a small proportion of children of school-going age receive any instruction, and few pass beyond the elementary standards Primary education is still left to a large extent to missionary bodies; and much of it is necessarily in the hands of inadequately trained teachers."

Admittedly, the British Raj has encouraged modern university education in India. Admittedly, there are signs that the government of the Homeland is giving consideration to expansion of educational facilities for the native population of West Africa, where the white settler is not yet politically in the ascendant, as in Kenya or the Rhodesias Admittedly, also, the home government has no jurisdiction over the Transvaal or the Orange Free

State, which have preserved the traditional outlook of those who participated in the Great Trek. The fact remains that the educational policy of Kenya and the Rhodesias, for which we still accept responsibility, is essentially akin to that of Dr. D. F. Malan, Oswald Pirow and other former friends of the Third Reich. In Southern Rhodesia the total government grant to missionary schools providing instruction for the native in 1935 was £52,926 for 105,466 pupils. The education of a European costs the government of Southern Rhodesia about £35; that of the native—if he gets any education at all—about 13s. The educational issue in the continent of Africa is not the traditional hostility of Briton and Boer in the era of Exeter Hall. It is whether men and women of British stock are prepared to undertake a crusade against illiteracy and malnutrition, with such singleness of purpose as the Soviet leaders have shown in their dealings with the backward minorities of the U S S R.

CHAPTER XVIII

THE EMPLOYMENT OF NATIVE LABOUR

THE most urgent problems of modern colonial administration involve the employment of native* labour by the white man. From the beginning of colonization the white man has regarded the black as inferior and hence to be exploited for his own benefit. Until about a hundred years ago the enslavement of African negroes was legal throughout the British Empire, and in the United States until 1863. Despite efforts of the League of Nations it persists to-day in parts of Africa, as well as in Arabia and China. Thus the abolition of slavery, as Lady Simon points out, is still an urgent international problem. There are many gradations between the position of the slave who, as such, can be sold by one master to another, and that of the free man. There is, for example, the serf whose rights of residence and labour obligations are regulated by the *pass laws* and the *Master and Servants Act* of the Union of South Africa. In medieval times serfdom was common in Europe It was not finally abolished in England until the sixteenth century, and in France until the Revolution Serfdom prevailed in the Scottish mines throughout the seventeenth and eighteenth centuries, and on Russian estates it persisted until almost the close of the nineteenth century. In parts of the British Empire there is still forced labour, and native labour is subject to legal sanctions which died out in England by the beginning of the seventeenth century

THE AMERICAN PLANTATIONS

In modern times slavery started as a by-product of the great voyages of discovery. The Portuguese were first to enslave African negroes, but the Spaniards were not slow to follow suit Finding the enslavement of the native West Indians impracticable, they gladly purchased African slaves from the Portuguese, who claimed a monopoly of this trade under the Papal Bull of 1493. This laid down that all lands within a hundred leagues west of the Azores should belong to Portugal, the rest to Spain. After the Reformation, Protestant nations naturally ignored this ruling Before 1600 Dutch and English were alike engaged in the trade

England's part in the slave trade began in Elizabethan days with the exploits of John Hawkins. For long, other Englishmen shrank from full participation in it. When Jobson, an English merchant, was offered slaves by West African native dealers in 1620, he refused on the ground that the English "were a people who did not deal in any such commodities, neither did we buy or sell one another, or any that had our shapes" (quoted MacInnes, *England and Slavery*, 1934, 19). Such views, however, were soon discarded The difficulty of enticing enough emigrants to meet the demands of the colonies and the unsuitability of white men for work on semi-tropical planta-

* According to modern usage the term *native* is largely confined to peoples of economically backward countries and so is used in a derogatory sense We do not usually talk of English natives, but we talk of African natives when we mean Africans.

tions overcame English scruples, and the Government soon accepted the view that the slave trade should be encouraged in the interests of commerce and empire. When the *Company of Royal Adventurers of England trading into Africa* was reconstituted in 1663, slave trading was explicitly mentioned as one of its objects. This is the first reference to slave trading as a recognized activity of a chartered company.

The Royal Adventurers Company had to face opposition of Dutch as well as of English merchants attracted by the profits of the traffic. Consequently, it was forced to resign its charter in 1672 to a new company, the Royal African, mainly composed of London merchants. Despite the issue of repeated Proclamations, interlopers from Bristol and other ports continued to trade in slaves in open violation of the monopoly. Complaints were made that the Company was inefficient, that it charged the planters unduly high prices In short, being monopolistic it was neither enterprising nor tolerant The number of competitors rapidly increased. Both Bristol and Liverpool soon earned for themselves the unenviable distinction of being the chief slave-trading ports of England. According to the ideas of the time it was undesirable that the trade should be carried on in this unorganized fashion, especially because it involved use of arms and maintenance of forts in Africa; and a compromise between the conflicting interests came about in 1698. In that year Parliament enacted that any English or colonial merchant might trade to Africa on payment of 10 per cent on all goods imported into or exported from Africa. The money so collected was to be paid to the Royal African Company for the maintenance of forts on the west coast of Africa. Neither company nor free trader was altogether pleased by the Act, but it remained the basis of the trade until 1807, when traffic in slaves was made illegal.

THE EXTENT OF THE SLAVE TRADE

The slave trade expanded very rapidly in the eighteenth century, especially after the Treaty of Utrecht in 1713. In addition to supplying her own colonies, Britain then secured the monopoly of supplying the Spanish colonies with slaves. The chief British ports engaged in it were London, Bristol and Liverpool, and of these Bristol easily took first place till 1760. In 1720 Bristol had 25 ships engaged in the slave trade, and in 1727 between 80 and 90. At the turn of the century Bristol's share accounted for one-fifth of the total British trade in slaves, but by 1768 it had fallen to one-ninth. Three years later Bristol had only 23 ships engaged. By this time her place was being taken by Liverpool. In 1751 Liverpool sent 53 ships to the coast of Africa, in 1771, 105, in 1791, 102. The peak year was 1799 when there were 134. Liverpool had then become the greatest slave-trading port in Britain Between 1783 and 1793 her ships carried 303,737 slaves valued at £15,186,850 In 1804 when the abolitionist movement was within reach of its goal, there were 147 ships in the trade and the slaves they carried numbered 36,889 (Elizabeth Doonan, *Documents Illustrative of the History of the Slave Trade to America*, 1931, ii, 49, 625)

In the West Indies, Jamaica was the main centre of the traffic and its white population was as much interested in trading in slaves as in planting.

Between 1707 and 1775, 497,730 slaves were brought to the island. Many were retained by the planters for their own use, others were re-exported to the mainland colonies or to Central and South America. Between 1680 and 1787, according to MacInnes, Britain imported into her American and West Indian colonies a total of 2,116,000 slaves. This great influx of negroes is reflected in population figures The slave population of Virginia rose from 6,000 in 1700 to 150,000 in 1760. In Maryland, another of the plantation colonies, there were 30,537 whites and 4,475 blacks in 1704, in 1790, 319,726 whites and 103,036 blacks. According to one estimate, Jamaica had 250,000 blacks in 1791 and 20,000 whites (Doonan, IV, 2*n*, 6).

These figures exhibit the making of a situation which demoralized and brutalized the white settlers, ever in terror that a vastly more numerous slave community would rise up and massacre them. In 1785 Zachary, father of T. B., Macaulay wrote.

"The air of this Island (Jamaica) has some peculiar quality in it, for no sooner does a person set foot on it than his former ways of thinking are entirely changed. The contagion of an universal example must indeed have its effect. You would hardly know your friend, with whom you have spent so many hours in more peaceful and more pleasant scenes, were you to view me in a field of canes, amidst perhaps a hundred of the sable race, cursing and bawling, while the noise of the whip resounding on their Shoulders, and the cries of the poor wretches, would make you imagine some unlucky accident had carried you to the doleful shades." (*Zachary Macaulay*, by Charles Booth, 1934, II)

The desire for cheap labour in the seventeenth and eighteenth centuries thus created social problems which the mere abolition of slavery could not solve. The economy of the West Indies is still based on abundant cheap coloured labour; and the ever-present consciousness of this fact is the cause of the rumblings which from time to time shake the economic life of these islands.

THE THREE-CORNERED TRADE

At a time when the trade to West Africa was giving employment to no less than 192 ships, in 1771, it was regarded with favour by many powerful interests at home and abroad. The slave merchants proclaimed that it was one of the pillars of Britain's commercial supremacy. The planters in the colonies regarded it as indispensable for their economic success There were many others who felt that this trade was indeed of immense economic importance. Those who supported the shipping interests argued that the slave trade was an essential and valuable business, because it gave employment to British ships. Some saw in the slave trade a means of keeping the colonies subservient to Britain. In a pamphlet of 1745, *The African Trade, the Great Pillar and Support of the British Plantation Trade* we read.

"Negro labour will keep them in Subserviency to the interests of their Mother Country; for while our Plantations depend only on Planting by Negroes . . our Colonies can never become independent of these Kingdoms "

The slave trade was three-cornered. Ships set sail from Bristol or Liverpool or London laden with all sorts of manufactured goods likely to be in demand among native peoples. For instance, the cargo of the *Norman* which left London in January 1714 for Sierra Leone, included the following miscellaneous goods.

6 casks of Earthenware, 60 swords, 20 bayonets, 20 buccaneer guns, 100 dozen knives, 24 pair shoes, 24 pair slippers, 3 casks of pewter ware, 2 casks of woollen goods, 6 gross tobacco pipes, 80 dozen brass chains, 1 chest Norwich stuffs, 1,054 iron bars, 10 barrels gunpowder, 30 quartes casks spirits, 280 brass kettles, 124 gallons brandy, 350 broad chintz. (Donnan, ii, 179.)

The value of English manufactured goods exported to Africa rose from £83,000 in 1701 to £147,000 in 1752 and to £474,000 in 1775 and to £583,000 in 1786. These goods were bartered for gold, elephant's teeth, slaves and other African goods, but as the century progressed slaves completely swamped all others in importance. Having secured its complement of slaves the ships set sail for Jamaica or Barbados or some other convenient slave market. When they had discharged their live cargo they filled up with sugar, tobacco and other colonial produce to set sail for home The round trip usually took about a year, but sometimes much longer, because they had to contend with calms and storms, with pirates and foreign vessels, with long delays in securing a full cargo of slaves, with disease and sometimes with mutiny. The slaving ships were generally small. In 1753 Liverpool's fleet consisted of 72 ships of an average tonnage just under 105. Larger ships were used later, but even in 1805 the average of Liverpool's ships was just over 226 tons. Large profits encouraged speculation, and many small partnerships owned vessels, but the general tendency was for the bulk of the trade to pass into the hands of large concerns In 1783 42 Liverpool houses were concerned in the slave trade, but more than half of the ships were owned by 13 of them. In 1792 there were 33 Liverpool firms in the trade, but 94 of the 139 ships owned by them were in the hands of 14 houses It is difficult to generalize about profits; but the following table* shows the profits made on five voyages between 1798 and 1805.

Ships	*Slaves Sold*	*Net Profit*	*Average Profit per Slave*
		£ s d	£ s d
Lottery	453	12,091 16 1	26 13 10
Lottery	305	11,039 9 6	36 3 10
Enterprize	392	6,428 6 5	16 7 11
Fortune	343	1,878 2 9	5 9 6
Louisa	326	8,551 3 10	26 4 7
	1,819	£39,988 19 7	£21 19 8

* *The Profits of the Guinea Trade*, by S. Dumbell, Econ. Hist, January 1931, 257.

THE PURCHASE OF SLAVES

The African Company as well as the foreign syndicates interested in the slave trade, maintained forts or armed trading stations on the Guinea coast (Fig. 91). The purchase of slaves was usually made by middlemen or factors who might be Europeans or Africans. Slavery and slave dealing were in fact at this time common among the natives of Africa, though there is also little doubt that the demands of the Europeans greatly stimulated the practice. Native wars were fomented. A witness before a Select Committee of 1790 declared that when there was a lull in tribal war the natives were supplied with ammunition, rum and tobacco at the European trading posts. Being thus equipped they made their war-cry and set off on a pillaging expedition. The witness thus described an expedition he himself accompanied:

"Having travelled all day, they came to a small river . . . Having crossed the river, they stopped till dark. Here Mr. Bowman (it was about the middle of the night) was afraid to go farther, and prevailed on the king's son to leave him a guard of four men. In half an hour he heard the war-cry, by which he understood they had reached a town. In about half an hour they returned, bringing from twenty-five to thirty men, women and children, some at the breast. At this time he saw the town in flames." (Quoted MacInnes, 60).

Having collected their slaves the traders chained or bound them together and drove them to the coast. The journey was often long, and the utmost cruelty was used by the captors equipped with whips and European arms. The slave whose physical endurance was exhausted on the march was left by the wayside to die. Sometimes the ships' captains purchased slaves direct from small slave dealers, but more often his representative or a middleman visited slave markets where a local chief carried on a thriving trade (Fig. 92). A vivid description of the transaction is given by her commander in a *Journal of a Voyage of the Hannibal of London* (1693–4):

"This morning I went ashore at Whidaw, accompany'd by my doctor and purser, Mr. Clay, the present Capt. of the *East India Merchant*, his doctor and purser, and about a dozen of our seamen for our guards arm'd, in order here to reside till we could purchase 1,300 negro slaves, which was the number we both wanted to compleat 700 for the *Hannibal* and 650 for the *East India Merchant*, according to our agreement in our charter-parties with the Royal African Company; in procuring which quantity of slaves we spent about nine weeks. . .

As soon as the king understood of our landing, he sent two of his cappashiers or noblemen to compliment us at our factory. . . . According to promise we attended his majesty with samples of our goods, and made our agreement about the prices, though not without some difficulty . . . When we were at the trunk, the King's slaves, if he had any, were the first offer'd for sale . . then the cappashiers each brought out his slaves according to his degree and quality, the greatest first, and our surgeon examin'd them well in all kinds, to see that they were sound in wind and limb, making them jump, stretch out their arms swiftly, looking in their mouths to judge of their age . . .

When our slaves were come to the seaside, our canoes were ready to carry them off to the longboat, if the sea permitted, and she convey'd them aboard

ship, where the men were all put in irons, two and two shackled together to prevent their mutiny or swimming ashore.

The negroes are so wilful and loth to leave their own country, that they often leap'd out of the canoes, boat and ship into the sea, and kept under water till they were drowned, to avoid being taken up and saved by our boats, which pursued them, they having a more dreadful apprehension of Barbadoes than we can have of hell. . . .

We spent in our passage from St. Thomas to Barbadoes two months eleven days from the 25th of August to the 4th of November following, in which time there happen'd much sickness and mortality among my poor men and negroes, that of the first we buried 14, and of the last 320." (Doonan, I, 392-410)

Largely through the influence of the anti-slavery movement conditions in the Middle Passage improved in the second half of the eighteenth century. Yet even so it was not uncommon for a vessel of 240 tons to carry 520 slaves. The horrors of the voyage were brought out in evidence before a House of Commons Committee in 1790 (Fig. 93). One captain stated that he

"made the most of the room and wedged them in They had not as much room as a man in his coffin either in length or breadth It was impossible for them to turn or to shift with any degree of ease" (quoted MacInnes, 79).

On arrival in the West Indies the slaves were sold either to the planters direct or more generally to dealers who drove them from one plantation to another, until they had disposed of the lot Notice of sale was usually advertised thus in the local press.

May 20, 1729

"Notice is hereby given that there's a Ship arrived in South River with about two Hundred choice Slaves, which will be expos'd to Sale on Thursday, the 22nd of this Instant, by DANIEL DULANEY, RICHARD SNOWDEN, and PETER HUME"

In the course of the eighteenth century, slave markets were established in every important colonial port. The following advertisement appeared in the *Virginia Gazette:*

June 4, 1772

"Two Hundred very likely African Slaves will be sold at Petersburg, on Thursday the 11th of this Instant (June) The terms of Payment will be made known on the Day of Sale Tobacco at the Cash Price, and Merchants Notes payable in Williamsburg, will be received; and five per Cent. will be discounted for ready Money"

HUGH M'MEKIN, NINIAN MENZIES, JOHN WALKER and Co.

N B—The slaves are all remarkably healthy, and none of them exceeds twenty five years of age" (quoted Doonan, IV, 25, 160).

A typical slave market was described thus:

"All being in readiness, the slaves were brought in, one at a time, and mounted upon the chair before the bidders, who handled and inspected them with as little concern as if they had been examining cattle at Smithfield market.

They turned them about, felt them, viewed their shape and limbs, looked into their mouths, made them jump and throw out their arms, and subjected them to all the means of trial as if dealing with a horse or any other brute animal" (MacInnes, 93)

When the ghastly business of selling was at an end, the dealers drove their wretched victims from one plantation to another until they had disposed of the lot. No respect was paid to the sentiments of the negroes. Families were broken up, wives separated from their husbands, and children torn from their parents.

THE EMPLOYMENT OF SLAVES

A few slaves were kept in domestic employment, and some were even brought to Britain to serve in the houses of wealthy planters, but the vast majority were employed on the sugar, tobacco, rice or cotton plantations. They usually worked in gangs under the supervision of an overseer who used the lash freely. The institution was degrading to everyone concerned. Planters, managers and overseers lived in constant dread of a vast sinister mass of black humanity which might rise at any moment to destroy them They believed that the only way to keep control was to use force. The callousness with which they treated their slaves was partly due to this fear, but it was partly due, too, to the unrestricted operation of an acquisitive tradition Old and weak slaves were usually turned away from the plantation to beg or to steal. A witness before the Select Committee of 1790 declared that one planter was accustomed "to frame pretences for the execution of his old worn out slaves, in order to get the island allowance" In Jamaica this amounted to £40 for any slave executed for a breach of the law. In general, slaves were poorly fed by their owners. The Committee of 1790 tells us:

"Each slave had a pint of grain for twenty-four hours, and sometimes half a rotten herring when to be had. When the herrings were unfit for the whites, they were bought up by planters for the slaves . . . in general they were too sparingly fed."

Sometimes slaves were given plots of ground to till; but this was a privilege of doubtful merit. Employment on the plantations generally left no time for cultivation, and slaves who were able to raise produce found their rations cut. Their clothes were of the poorest and meanest Children up to the age of twelve usually went about naked, their parents clothed in rags. To quote again, from the Select Committee of 1790:

"The men . . . at Christmas are allowed two frocks, and two pairs of Osnaburg trousers, and the women two coats and two shifts apiece. Some also have two handkerchiefs for the head. They have no other clothes than these, except they get them by their own extra labour . . . the masters did not spend for the clothing of their slaves more than half-a-crown or three shillings a year" (MacInnes, 112–113.)

The lot of those employed in domestic service was better and depended chiefly on the individual employer. Doubtless some were treated with kindness and humanity, but the atmosphere of slavery tended to create harshness

and cruelty wherever it existed. Flogging was not confined to the plantations. In domestic service there were professional floggers called Jumpers, who went from house to house with their long whips "generally made of plaited cowskin, with a thick strong lash." Sometimes the slaves were whipped on the premises, but when the master or mistress wished to be spared the shrieks of agony they were taken to the gaol or wharf where the Jumper had free scope for the prosecution of his loathsome calling.

THE ABOLITION OF THE SLAVE TRADE

The abolition of the slave trade in 1807 is one of the great achievements of the humanitarian movement which took shape in the first few decades of the nineteenth century. The day was carried by a mere handful of powerful advocates who carried the mass of ordinary people with them, and, by sheer force of character, compelled Parliament to admit the justice of their cause The revolution in opinion is one of the most remarkable by-products of the century that ended with the French Revolution One of its significant features is the way in which the new instrument of journalism helped to arouse public opinion. Quakers, Wesleyans and Evangelicals all played a notable part in the movement, but it is to the first perhaps that greatest credit is due. In his *Anti-Slavery Movement in England* (1936) Professor Klingberg tells us that as early as 1671 George Fox, the founder of the Quakers in England, favoured the gradual emancipation of slaves.

"Then as to their blacks or negroes," he says, "I desired them (the Friends in Barbadoes) to endeavour to train them up in the fear of God, as well those that were bought with their money as those that were born in their families. . . I desired also that they would cause their overseers to deal mildly and gently with their Negroes, and not use cruelty toward them, as the manner of some hath been and is, and *that after certain years of servitude they should set them free* "

In 1727 the Society of Friends condemned both the slave trade and the ownership of slaves. "It is the sense of the meeting," ran their resolution,

"that the importing of negroes from their native country and relations, by Friends, is not a commendable or allowed practice, and is, therefore, censured by this meeting "

Quaker influence was early at work in the colonies Before the close of the seventeenth century Pennsylvania Quakers had proclaimed their opposition to the slave trade, and their belief that negroes should be allowed to share in their devotional exercises. In 1754 they declared their conviction that slave trading was "man stealing" and so punishable by death. Such a declaration, however, was not sufficient to deter all members, and in later resolutions those guilty of owning or trading in slaves were liable to be excluded from membership. By 1780, says Klingberg·

"slavery had almost disappeared in the Philadelphia Quaker district, and seems to have been given up by all other American Quakers about the same time. It lingered longer in the South "

The growth of humanitarian sentiment towards the end of the eighteenth century slowly but surely created a new outlook not only with regard to slaves and primitive peoples, but to all sorts of social evils from prisons and workhouses to child employment in factories. The slowness with which the new outlook spread is partly attributable to the complacency and self-satisfaction of the Georgian upper classes. The wealthy planter class was indeed well represented in the House of Lords. A new attitude can be traced as far back as the seventeenth century. Locke condemned slavery with no uncertain sound, and Swift spoke in biting terms of the white man's conquest of new lands and his attitude to primitive peoples:

"A Crew of Pyrates are driven by a storm they know not whither, at length a Boy discovers Land from the Top-mast, they go on shore to rob and plunder, they see an harmless People, are entertained with Kindness, they give the Country a new Name, they take formal Possession of it for their King, they set up a rotten Plank or a Stone for a Memorial, they murder two or three dozen of the Natives, bring away a couple more by Force for a Sample, return home, and get their Pardon. Here commences a new Dominion acquired with a Title by *Divine Right*. Ships are sent with the first Opportunity, the Natives driven out or destroyed, their Princes tortured to discover their Gold, a free Licence given to all Acts of Inhumanity and Lust, the Earth reeking with the blood of its Inhabitants; and this execrable Crew of Butchers, employed in so pious an Expedition, is a *modern Colony* sent to convert and civilize an idolatrous and barbarous People."

Somewhat later in his *Spirit of Laws* (1748) Montesquieu turned the full force of his satire on the institution at that time supported alike by Britain and France: "Were I to vindicate our right to make slaves of the Negroes," he writes, "these should be my arguments "

"The Europeans, having extirpated the Americans, were obliged to make slaves of the Africans for clearing such vast tracts of land Sugar would be too dear, if the plants which produce it were cultivated by any other than slaves These creatures are all over black, and with such a flat nose, that they can scarcely be pitied.

It is hardly to be believed that God, who is a wise Being, should place a soul, especially a good soul, in such a black ugly body . . .

The Negroes prefer a glass necklace to that gold, which polite nations so highly value can there be a greater proof of their wanting commonsense?" (1756, ed 1, 261).

The first decisive step in the fight for abolition took place in 1772. At this time there were many slaves employed in England by planters as domestic servants. One estimate placed the number as high as 14,000 or 15,000. There was much confusion about whether slavery was legally permissible in Britain, and judges were reluctant to give a decision involving the destruction of about £700,000 worth of property, since slaves were valued at £50 a piece. Granville Sharp decided to bring the issue to court and at last in 1772 he succeeded. This test case vindicated his claim A Virginian slave, Sommersett by name, who had been brought to England by his master, and then escaped only to be recaptured, became a free man. The Judge, Lord Mansfield, declared:

"Whatever inconveniences, therefore, may follow from the decision, I cannot say this case is allowed or approved by the law of England, and therefore the black must be discharged"

Six years later there was a similar test case in Scotland There too the decision was in favour of freedom; but the Scottish decision went farther than the English Indeed, it implied a condemnation of the whole institution of slavery:

"The Court were of opinion, that the dominion assumed over this negro under the law of Jamaica, being unjust could not be supported in this country to any extent, that, therefore, the defender had no right to the negro's service for any space of time, nor to send him out of the country against his consent"

The Sommersett case was the first great triumph in the battle to end slavery; and such a notable victory was not without its effect on public opinion. It gave great encouragement to the small band of men in season and out working for the cause For a time the American War of Independence checked the slave trade, as indeed it checked commerce in general, but the Peace of 1783 once more revived the old horrors. English Quakers, who had already played a noble part in the movement, immediately decided to redouble their efforts Accordingly they formed a Committee to carry on propaganda in the press, by pamphlets and on the platform Powerful recruits joined the movement. In 1786 Thomas Clarkson published his *Essay on the Slavery and Commerce of the Human Species*, and in the following year William Wilberforce, who was to become a prominent advocate of the movement in the House of Commons, declared his attachment to abolition.

At this time the *Society for the Abolition of the Slave Trade*, founded in London, absorbed the Quaker Committee It gathered under its banner all manner of men willing to work to that end, and some of its members, distinguished in many walks of life, did yeoman service for the cause Clarkson, who was one of the most indefatigable members, visited Bristol and Liverpool to collect facts about the trade in the face of bitter opposition from powerful slave interests. Meantime Wilberforce had found a valuable ally in Pitt. When the Society presented its evidence to Parliament the issue was regarded as sufficiently important to call for a Committee of the Privy Council to inquire into the whole problem Largely through the efforts of the Society, an Act was passed in 1788 to enforce more humane conditions on slaving ships In May of the following year Wilberforce made his first great speech on the subject in the House of Commons Of this memorable occasion the Bishop of London wrote:

"It is with heartfelt satisfaction I acquaint you that Mr Wilberforce yesterday opened the important subject of the Slave Trade in the House of Commons, in one of the ablest and most eloquent speeches that was ever heard in that or any other place It continued upwards of three hours, and made a sensible and powerful impression upon the House He was supported in the noblest manner by Mr Pitt, Mr Burke and Mr. Fox, who all agreed in declaring that the Slave Trade was the disgrace and opprobrium of this country, and that nothing but entire abolition could cure so monstrous an evil It was a glorious night for this country" (quoted Klingberg, 85).

The House decided to refer the matter to a Select Committee, and nothing was done. In 1791 Wilberforce again raised the issue Influential slave interests were well prepared and offered formidable opposition, strongly supported by those who combined the belief that private property is sacred with the conviction that other forms of property might as easily be attacked, if the slave trade were abolished. Despite the enthusiastic support of Pitt, Burke and Fox, a motion by Wilberforce was defeated by 163 votes to 88. Nothing daunted, the Abolitionists continued their campaign. In the following year Wilberforce persisted in the House. Petitions in support poured in from all over the country. The moment was unpropitious. The French Revolution was a very present challenge to the established order of things. There were negro riots in the French West Indies and in the British Island of Dominica. None the less, the House of Commons agreed to an immediate amelioration of slave conditions and the gradual abolition of the trade by 1796. The House of Lords stood out. It evaded the issue by deciding to call for more evidence. This naturally postponed any immediate settlement. When conflict with France broke out in 1793, the goal of the Abolitionists seemed farther off than ever.

Year after year till 1800 Wilberforce continued to introduce his motion, and each time met with defeat. From 1800 to 1804 he kept silent, as the more prudent course to adopt till the fear of revolution had receded Pitt then prepared the way for final abolition by an Order in Council of 1805. This forbade the importation of slaves into colonies recently acquired. In 1807 an Act of Abolition so far as concerned the traffic in slaves was put in the Statute Book. It came into force in the following year, but it was long before the slave trade was thoroughly stamped out. The Abolitionists continued to press the Government to use its utmost endeavours to enforce the new law. They persuaded it to police the seas along the west coast of Africa, and they secured official support for the colony of Sierra Leone, established by them as an example of an African colony run without slavery and designed to develop the natural resources of the country In 1811 Parliament made slave trading a crime punishable by fourteen years' transportation. In 1824 it was decreed piracy and punishable by death.

Meantime efforts were being made to persuade other countries to follow suit. On the restoration of the Bourbon monarchy in 1814, France promised to abolish the slave trade within five years. When Napoleon returned from Elba, however, he made a bid for liberal support by decreeing immediate abolition. This was confirmed in the Second Treaty of Paris in 1815. Meantime efforts were made to persuade Portugal and Spain to come into line, but agreements were dishonoured and negotiations prolonged British men-of-war took up the task when diplomacy failed. And so a great deal of illicit trade in slaves went on Since it was conducted in secrecy, conditions on board ship were worse than ever. More than two-thirds of the slaves died on the voyage across the Atlantic "The slave trade," said Canning in 1822,

"so far from being diminished in extent by the exact amount of what was in former times the British demand, is upon the whole, perhaps, greater than it was at the period when that demand was highest, and the aggregate of human

suffering and the waste of human life, in the transport of slaves from the coast of Africa to the colonies, is increased in a ratio enormously greater than the increase of positive numbers. It seems as if those who continue this abominable traffic had a malicious pleasure in defeating the calculations of benevolence, and in visiting upon the innocent victims of their avarice the fruitless endeavours to rescue those victims from their power" (quoted Klingberg, 167).

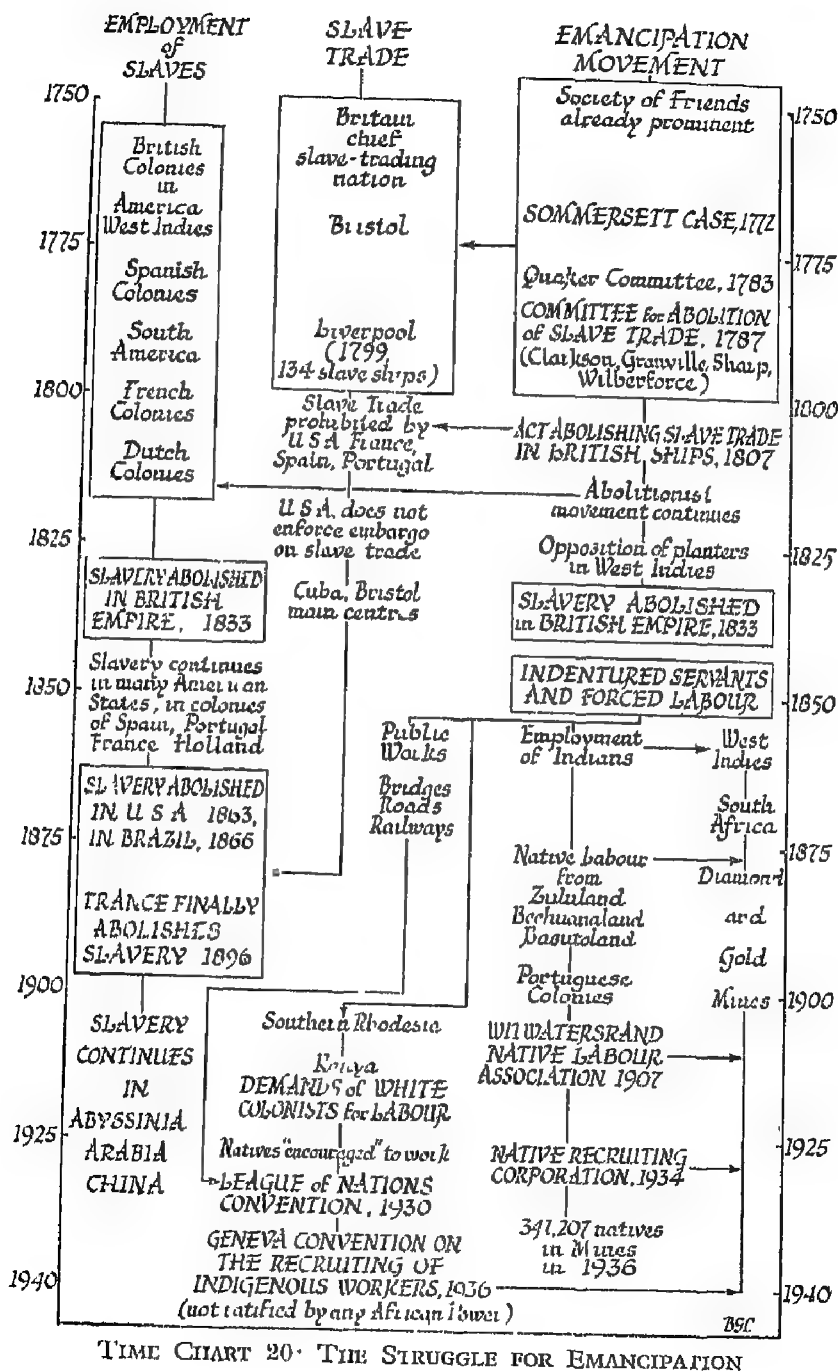
THE ABOLITION OF SLAVERY

The only effective solution seemed to be the complete abolition of slavery itself This had been recognized by the Abolitionists in the eighteenth century, but believing that they were more likely to succeed by taking one step at a time, they concentrated their attention on the trade. A new campaign started in 1823 with the organization of the Anti-Slavery Society. Once more Wilberforce was in the forefront of the fight. Many of his old supporters had long since died, but others were ready to take their place. Of these Thomas Fowell Buxton and Henry Brougham were in Parliament, James Stephen and Zachary Macaulay were prominent outside. Once more, press, pamphlet and petition were used to arouse public opinion. In 1823 Buxton brought the matter before the House of Commons He proposed that all children born to slaves after a certain date should be free and that the condition of adult slaves should gradually be improved. Canning agreed that the ultimate object should be freedom, but he urged that the first step should be an improvement in the lot of the slaves. The policy of amelioration was accepted, and the various colonial legislatures were pressed by the home government to introduce various reforms, such as to abolish the flogging of women and the use of the lash in the field The policy met with opposition from the colonists as well as from the planter interests at home. They were eloquent about interference with the rights of self-government and hinted that the colonists would follow the example of the United States Thus the Assembly of Jamaica declared

"A decree has gone forth whereby the inhabitants of this once valuable colony, hitherto esteemed the brightest jewel in the British crown, are destined to be offered a propitiatory sacrifice at the altar of fanaticism" (quoted MacInnes, 171)

This bravado of the West Indian colonists was grotesque For they numbered in 1793 only 65,305 scattered among many different islands The upshot was that the colonies did little to carry out the policy of the home government. Strongly urged again, in 1828, to improve their slave laws, they did nothing. The home government could no longer temporize. In 1833 it passed the *Emancipation Act*. All slaves were to be freed within twelve months Those employed in agricultural work were to be apprenticed to their employers until 1838, and those in domestic employment until 1840. The dispossessed owners received £20,000,000 in compensation, £5,000,000 more than was originally proposed, because the pressure of the planters' friends was powerful In practice the apprenticeship system broke down and unconditional freedom was granted in 1838.

*



TIME CHART 20: THE STRUGGLE FOR EMANCIPATION

SLAVERY IN THE NINETEENTH AND TWENTIETH CENTURIES

With the passing of the Emancipation Act of 1833 Britain directed her attention to securing similar concessions from other countries. Some states had been ready to abolish the slave trade long before then. Denmark led the way, and actually preceded Britain. In 1792 she decreed that the trade should cease in all her possessions by 1802. In 1807 the United States had prohibited the importation of African slaves and in 1813 and 1814 Sweden and Holland had followed suit. Much remained to be done after 1833, because some countries, like France, went back on their word, others, like the United States, did not enforce the embargo on importation, and some, like Brazil and Cuba, placed no restrictions whatsoever on the trade Actual slavery was still permissible in many of the American States as well as in the colonies of Spain, Portugal, Holland, Sweden and France. Indeed, it has been computed that more slaves were shipped across the Atlantic after 1833 than before Eight years after the British Emancipation Act there were no less than 6,397,300 slaves in countries under Christian governments (Fig. 94).

The most serious problem was the United States. The system of slave labour had been riveted on the southern states in colonial days. It continued long after the Declaration of Independence. Initially, its basis was the tobacco, sugar and rice plantations, but from about 1800, following the invention of the cotton gin, cotton growing created a new and greater demand for slaves. In 1800 the United States exported about 18m lb. of cotton. On the eve of the abolition of slavery in 1860, the figure was 1,767m lb. and this was mainly produced by slave labour. It is not surprising that the number of slaves in the United States steadily mounted from 697,890 in 1790 to 2,009,040 in 1830 and to 3,953,580 in 1860.* These slaves were not evenly distributed over the country. Indeed some states had already declared their attachment to freedom. Thus of the twenty-two states in 1819, eleven were slave and eleven free

This clash of interest was what made it impossible for the United States to speak with one voice. It is true there was a very large anti-slavery movement; but the slave interests were extremely powerful The Federal Government had prohibited the slave trade in 1807 and had declared it piracy in 1820; but smuggling of negroes continued long after that. If federal customs agents were over-zealous in the southern states, they met with the opposition of a violent and well-organized public opinion which favoured slavery. The trade was a well-organized and extensive business. Companies in New York and other great ports specialized in fitting out slave ships; and Americans openly took part in shipping slaves to Cuba as well as to their own country. In 1860, it was stated that 85 slavers had cleared from American ports in the previous eighteen months. Of the 170 slave-trading expeditions which sailed for Africa between 1859 and 1862, 74 came from New York, 43 from other American ports, 40 from Cuba and the remainder from Europe.† The controversy reached its climax in 1860 when the seven southern states, headed by South Carolina, seceded from the Union. Civil war broke out in 1861. The issue was never long in doubt. Politically, economically and morally

* Lippincott, *Economic Development of the United States*, 159.
† MacInnes, 176.

advantage lay with the northern states In 1863 slaves were declared free in all states

Meantime Cuba and Brazil placed no restrictions either on the slave trade or on slavery. As the sugar industry expanded thousands of Africans poured into these countries to suffer under a system, the brutality of which surpassed that of slavery in any other age. Floggings and torture were commonplace. Unspeakable horrors were everywhere practised to get the last ounce of energy out of the slave. Small wonder that the working life of a slave was put at ten years. MacInnes says:

"From the interior of Africa to the coast there moved every year a mighty multitude of miserable Africans who had been torn from their homes and whose sad road was white with the bones of those who had fallen by the wayside. In 1845 Lord Palmerston estimated their number at 120,000."

Throughout this period, British warships played a creditable part in checking the slave trade. Between 1810 and 1846 they were responsible for capturing and setting free 116,862 captives. Attempts to evade capture resulted in revolting cruelties on the slave ships. On the larger ships negroes were packed so tightly that they were unable to move. When capture seemed imminent, it was not uncommon for the white crew to jettison their human cargo. Portuguese syndicates which controlled the trade to Brazil made enormous profits out of it, before it came to an end in the sixties, and slave-owning went on in that country until 1888. France was one of the worst offenders, for despite repeated concessions to the anti-slavery sentiment of Britain she did not finally abolish slavery in her own colonies until 1896 Even at the close of the Victorian era slavery still went on. For centuries the caravans of slaves had made their way from the interior of Africa to the Sudan, to Egypt and North Africa, and eastwards to the coast to the great slave market at Zanzibar. It was extremely difficult to check the overland trade. All through the nineteenth century the French islands provided a ready demand for its produce; and the bulk of the trade was in the hands of Arabs and Abyssinians who were untouched by the humanitarian zeal of European reformers.

As late as January 1, 1928, 214,000 slaves in the British Protectorate of Sierra Leone became free. At the same date slavery was stopped on the borders of Burma between the Irawadi and the Chinese border. Abyssinia, Arabia and China have remained intractable to this day. At the Conference of Berlin, in 1885, when the Great Powers drew up schemes for the partition of Africa it was agreed that each Power should

"employ all the means at its disposal for putting an end to this trade, and for punishing those who engage in it."

Four years later the slave trade was once more discussed at the Brussels Conference. "In the name of Almighty God," the Powers declared their "firm intention of putting an end to the crimes and devastations engendered by the traffic in African slaves." Yet it is only since the first world war that effective steps have been taken to deal with slavery as a crime against

humanity. In 1919 the signatories to the Convention of St. Germain, being all members of the League of Nations, bound themselves to abolish both the slave trade and the status of slavery The magnitude of the task entrusted to the permanent committee appointed in 1932 is set forth in Lady Simon's book, as well as in the various reports on the subject presented to the League of Nations According to Lady Simon there were at least 2,000,000 slaves in Abyssinia, where slave-dealing was a well-organized business, on behalf of which raids were frequently made into the Sudan as well as into Kenya. Large numbers were also sold to Arab dealers who shipped them across the Red Sea. In 1922, Major Darley, who had been employed by the British Foreign Office on a Boundary Commission in Abyssinia, wrote:

"Gangs of slaves, marching in misery, the men chained together in rows, and the women and children dragging themselves along beside the main body, can be seen by any traveller in Southern Abyssinia to-day Some of these slaves are captured on Abyssinian territory, others in British East Africa, others in the Anglo-Egyptian Sudan" (quoted Simon, *Slavery*, 29)

The horrors of the voyage across the Red Sea to Arabia are described by a British mercantile marine officer in 1933:

"We could hear heartrending cries coming down wind and could see that she was packed from end to end of her open waist with stalwart negroes seated on thwarts or benches, and evidently fastened by their ankles to the bottom of the compartment About twelve or fourteen were stowed abreast, and there were about twenty rows of them, so that meant some 200 to 300 poor wretches were being transported in one vessel" (MacInnes, 193)

According to the Temporary Slave Commission of the League of Nations the African slaves had to pass through territory belonging to Britain, France, Italy or Egypt in order to get to Arabia. In the island of Hong Kong, which has been British territory since 1841, the Mui Tsai system of selling children into employment was still prevalent a few years ago, and that despite repeated official attempts to stamp it out. In 1922 the home government announced that the system was to be abolished within a year. Writing in 1929, Lady Simon says:

"It has not been abolished, indeed, the most recent information on the subject seems to show that the number of these children in bondage is actually increasing."

INDENTURED SERVANTS

So far we have spoken of slavery *sensu stricto*. The individual is regarded as property, to be bought and sold, to be worked and managed exclusively in the interests of the owner without regard to family ties. There are other forms of labour service scarcely less exacting in practice, and it is to a consideration of these that we now turn. One such, the system of *indentured* service, has been widely employed by the British, and has been the chief instrument for recruiting unskilled labour for the Rand mines in the Union of South Africa. After the abolition of slavery in 1833 the West Indian

planters imported large numbers of servants under long-term contracts from India. As a consequence, in 1931 there were no less than 151,000 Indians out of a total population of roughly 448,000 in Trinidad. Such service did not involve ownership. It differed from ordinary wage labour primarily in so far as it involved a written contract by which the employee undertook to work for a certain term varying from six months to three years. On the face of it the distinction might appear to be trivial but the contract is peculiarly open to abuse. It may be written in a language which the illiterate signatory does not understand, and in any case the idiom is foreign to his native code. The conditions to which it commits him, especially as the system works in the Portuguese colonies of Africa, may be scarcely distinguishable from slavery, indeed only in so far as the employer cannot sell his body in the open market The revelations made at the Cadbury Standard Trial at the Birmingham Assize in 1909 demonstrated how trivial is the difference between slavery and so-called contract labour in practice Of 67,000 natives shipped between 1888 and 1908 from the Portuguese mainland to the cocoa island of San Tomé and Principe, hardly any were ever permitted to return In a memorandum submitted to the League of Nations in 1926, Professor Schwarz of Rhodes University College, Grahamstown, wrote.

"It may be diplomatic to shut one's eye to the slave raids of the Portuguese, but the fact remains that the worst horrors of the slave trade are still being carried on in Portuguese Africa."

FORCED LABOUR

Another system of employment is called *forced labour* Most colonizing powers exact forced labour for public works. The usual term varies from 24 to 60 days and the employee usually receives wages. The moral excuse put forward for forced labour is that certain works, such as roads, bridges or railways are of benefit to the native community itself. Hence it is argued that everyone should be liable to contribute to their construction, in accordance with tribal obligations in virtue of which the Chief can call on the labour of every man. The plea is that forced labour is legitimate under conditions to which the native is accustomed and hence legitimate under the more civilized conditions of white colonization There are, however, two essential differences. In the first place, labour demanded by the Chief in an emergency may amount only to a few days, whereas modern road- or bridge-building by white settlers may involve months of exacting toil. In the second place, native forced labour does not strike at the roots of normal community life, whereas work for white settlers, which often entails long absence from home, removes the native from his customary social environment. "The wide use made of impressed labour for railway construction in Africa," says Lord Hailey (*African Survey*, 615)

"has, in the past, led to many incidents which have reflected grave discredit on the administrations. There was, in many cases, a failure to provide either statutory safeguards regulating the use of impressment or the necessary supervision over recruiting operations, in other cases no precautions were taken to maintain the health on the journey to the place of work or during the

stay there of the labourers so employed. The consequent suffering and dislocation of life were undoubtedly great."

In the last few years, general depression in trade has practically wiped out the demand for forced labour, but many British colonies still possess powers to impress labour for public works *whenever they wish*. The tendency on the whole, however, is to restrict such employment; and British practice, like that of the other Great Powers, is now governed by the League of Nations Convention of 1930, which, though permitting compulsory labour "in cases of emergency and labour for minor services in the direct interest of the community" recorded its disapproval of forced labour for transport purposes and declared that it should be abolished within the shortest possible period. A considerable amount of labour is made available for governmental purposes by tax defaulters or by the system of giving labour in lieu of taxes. For example, in Tanganyika and Uganda natives give their services instead of paying taxes in cash, and in these and other colonies tax defaulters serve sentences in labour camps. In some cases, as in Northern Rhodesia, there are tax relief schemes by which natives can work off arrears of taxes by serving with the government for a specified period. This service amounts to a considerable total. In 1936, no less than 31,605 men gave in all 1,285,352 days of labour to the government of Tanganyika in lieu of tax payment. The obvious abuse to which this system is too prone is that taxes may be, and indeed are often, raised with the express purpose of compelling natives to give their labour.

FORCED LABOUR FOR PRIVATE EMPLOYMENT

Much less plausible than labour conscripted for public works is forced labour for private employment. Because of the devious methods employed to coerce natives, it is difficult to expose the existence of this practice Pressure may be exerted directly by government officials, or indirectly as when chiefs are encouraged, and perhaps bribed, to induce people to seek employment. Sometimes the heavy taxes levied on the native force him to seek an additional source of income which usually means taking employment at the mines, plantations or factories of the white man. Curtailment of lands available for native cultivation has the same outcome

Forced labour had its origins in the conditions that followed the abolition of slavery. Indeed, the institution of slavery still determines the relationship of white man and black. The belief held when slave-owning was legal, and still widely held, is that the blacks should be the hewers of wood and drawers of water. If the native does not respond to the economic incentive, because he does not understand it or appreciate it, pressure has to be used to compel him to fulfil his predestined role. Those who hesitate to fall back on such premises, urge alternatively that the exploitation of the natural resources of the colonies involves labour which the white man alone cannot supply; and ask why the natives should not co-operate in work to their own ultimate benefit.

The discovery of diamonds and later of gold in the Witwatersrand raised the problem in an acute form Pressure was brought to bear on the chiefs

in Zululand, Bechuanaland and Basutoland to secure labour, and the native poll tax was used to drive natives to seek work outside their reserves. In 1857 the hut tax in Natal was raised from seven to eleven shillings a year on natives not working for Europeans. Behind the Glen Grey Act of 1894, there was the same demand for labour By substituting small individual holdings for the communal system, Rhodes hoped to give the surplus population a "gentle stimulant to go forth and find out something of the dignity of labour" (Hailey, 638). The lack of response from local sources soon made mineowners look beyond the Union for labour. Indentured servants were brought from India to Natal as early as 1860, and in 1896 the Portuguese Government permitted recruitment for the Rand mines in their African colonies. After the Boer War there was an acute shortage of labour at the mines. For a time Chinese were imported, while recruitment in Portuguese territory was intensified. To exploit the latter source the Witwatersrand Native Labour Association was formed, and it employed large numbers of European and native recruiting agents in Mozambique An element of compulsion was permitted by the Portuguese Government until 1926 when, through the influence of the League of Nations, it was abolished. In fact legal compulsion is no necessary part of the agent's traffic. The trader in native wares works hand in glove with him The native with imperfect notions of the law of debt is encouraged to consume goods for which he can only pay by contracting to work in the mines.

Recruitment of labour within British territories was handled by a similar organization—the Native Recruiting Corporation—founded in 1904 By its system of paying capitation fees to its agents, usually European traders resident in the native districts, the door is wide open to entice the tribal native to incur bills which he can legally honour in one way alone. The system of advancing travelling expenses and wages simplifies the transaction On arrival at the mines, the recruit has no option but to accept whatever conditions of employment the owners impose. Having signed his contract, desertion is punished by a fine of £10, nearly six months net earnings, or by two months' hard labour At the end of 1936 there were 341,207 natives employed on the Rand mines. Of these 89,104 came from Portuguese territory, 49,582 from Basutoland, 7,521 from Bechuanaland, 7,316 from Swaziland, and 3,833 from other territories (Hailey, 652). This drift to the industrial districts was intensified by the pressure of population in the native reserves and by the imposition of heavy taxes to be paid in cash (Fig. 95)

Such concentration of large numbers of natives at the mines or in the towns, far removed from tribal influences and tribal standards, has a demoralizing effect on them. They readily fall victims to all the vices of urban life. Disruption of their customary mode of life is accentuated by the fact that men usually come alone, leaving their families behind, and when they return to their homes, after absence of six months or a year, they find it difficult to fit into their old social environment. The town dweller, as distinguished from the mine worker, may take root in his new environment; and if he marries, the chances are that he will settle there and his children will be brought up as urban workers, completely divorced from the tribal customs and standards of their parents, but without assurance of oppor-

tunities of self-improvement or education for full citizenship in a new social environment (Fig 96).

In some parts of Africa scarcity of labour has led white settlers to seek government aid in recruiting labour. Both in Southern Rhodesia and in Kenya official help has been given In 1901 the Secretary of State had forbidden the use of direct or indirect pressure, but largely through the influence of the mine owners of Southern Rhodesia, he revised his order in 1907 and allowed officers "to advise" natives to go to work. The Chamber of Mines, however, was not satisfied with this, and they represented to the Government that it was "the obvious duty of the State, through its recognized officials, ceaselessly to place before the native population the benefits to be derived from industry." The Government, at that time, refused to go beyond advising natives to seek employment; but the pressure of vested interests was maintained In reply to resolutions of the Agricultural Union, in 1925, the Governor of Southern Rhodesia declared:

"Any measures taken by Government to apply compulsion to natives to secure an adequate supply of labour for private employers would be opposed to the traditional policy of His Majesty's Government, and would be altogether repugnant to the sentiment of the Imperial Parliament" (Buell, i, 230).

The following are extracts from Acts which show how closely the policy of Southern Rhodesia tallies with that of the Dominion of South Africa

(1) *Native Juveniles Employment Act*, No. 10, 1926, Southern Rhodesia, Section 2, Sub-section 4:

"The Native Commissioner of the district in which any juvenile is employed may hear and determine any charge or *complaint brought by an employer* against a juvenile in his service and arising from *any breach of duty* due to an act or *omission* and . . . if the offender be a boy order such juvenile to receive a summary whipping with a light cane not to exceed ten strokes"

"Any male juvenile who shall *fail* or refuse to obey any order of a Native Commissioner given in pursuance of the provisions of this Act shall be liable to a summary whipping with a light cane not exceeding ten strokes"

(2) Native Service Contract Act, No. 24, 1938, Union of South Africa. Section II:

"Any contravention by a male servant who is or appears to be not more than eighteen years of age of any provision of the law relating to masters and servants shall be punishable . . . by a whipping not exceeding five strokes."

From 1907 to 1928 how much encouragement or compulsion should be exercised officially in the interests of private employers was hotly debated in Kenya as well as at home About 1907 white settlers began to arrive in large numbers in Kenya and at once were faced with labour shortage The Government decided to help by directing its officers to "do their best to supply labourers for settlers, planters, contractors and others," provided they treated them properly The white settlers were dissatisfied with this concession and declared that the Government should do more Some of the settlers demanded compulsion.

"We have got to come to legalised methods," said Lord Delamere in 1908, "and force the native to work; I hope that we may rely on the Government to meet the case"

On this occasion, the Governor refused to go beyond "encouragement," and in 1909 the Secretary of State decreed that government recruiting of labour for the farm population should cease Three years later an inquiry revealed that chiefs and officials both exerted pressure on natives to go out to work. During the first world war white settlers continued to press their claims, and in 1917 the Governor of Kenya expressed open sympathy for their point of view: "If any impression still exists," he said,

"that the legitimate requirements of the farmers are to be subordinated to the policy of confining the native to his reserve, I trust that these words may be sufficient to dispel that impression once and for all. . . . I am prepared to state definitely that we desire to make the native a useful citizen and that we consider the best means of doing so is to induce him to work for a period of his life for the European . . . We further desire, by humane and properly regulated pressure within the reserves, to induce natives to go out and work either as individuals or as residents with their families in occupied farms" (Buell, i, 332).

Those who favoured compulsory labour had just cause to feel satisfied with the Native Labour Circular issued by the Government of Kenya in 1919. The instructions were as follows.

(1) "All Government officials in charge of native areas must exercise every possible lawful influence to induce able-bodied natives to go into the labour field. Where farms are situated in the vicinity of a native area, women and children should be encouraged to go out for such labour as they can perform.

(2) Native Chiefs and Elders must at all times render all possible lawful assistance on the foregoing lines. They should be repeatedly reminded that it is part of their duty to advise and encourage all unemployed young men in the areas under their jurisdiction to go out and work on the plantations . ."

Of this Mr. Buell writes:

"Various district commissioners now went to work with a vengeance. At Kyambu, the local official issued a circular stating that he intended to arrange for a 'temporary supply of child labour from the reserves' to pick the coffee crop and saying, 'I shall be glad if any coffee growers who may like to employ these children will write his name thereon, stating the number required, the time for which they may be most needed"

The promulgation of these regulations caused a great stir at home, and the outcome was the issue of Lord Milner's despatch of 1920 This declared that natives in British colonies might be required to engage in public works for wages, provided that no one should be compelled to work: (a) for a longer period than sixty days in any one year; (b) if he was fully employed in any occupation or had been so employed during the preceding twelve months for a period of three months. In reality, the despatch endorsed the policy of the Kenya white settlers by saying that advice and encouragement should be given to chiefs and headmen, though compulsion was not to be permitted.

The white colonists welcomed this, believing that the second clause gave them powers to coerce anyone who had not worked on a white man's plantation for three months in each year. When counsel's opinion was sought on the meaning of the clause, the ruling given was that work of any kind would satisfy the condition. In other words, three months labour by a native on his own land would suffice to free him from compulsory service. The acceptance of this decision by the Government caused consternation in the colony. Despite the fact that employment had increased from 90,000 in 1920 to 185,409 in 1927 there was still great scarcity of labour, and since the economy of the colony was based on the employment of cheap unskilled labour, the demands of planters and farmers for natives was insatiable. The colonists, therefore, continued to agitate, until the Government finally retreated from its policy of neutrality. In March, 1925, the Colonial Governor declared.

> "The Government expect every administrative officer to give all possible encouragement to the labour within their district to work on the lands which have been opened up by the settlers"

It is difficult to define the position since then In 1926 the Governor of East Africa maintained that where productive labour was not possible within the reserves, the native should be actively encouraged to go out and work; and the recent Commission on Closer Union in East and Central Africa was not averse to encouraging natives to work in non-native enterprise, provided no compulsion was used. In practice, it is impossible to decide where encouragement stops and compulsion begins Lord Lugard sums up the position when he says:

> "Compulsion is only justified where labour cannot otherwise be procured for public works of an essential and urgent nature It is preferable that it should be avoided if possible for ordinary and continuing works, since it militates against the evolution of voluntary contract by rendering Government employment unpopular. Primitive tribes are suspicious, and fear employment by the white man In such a case the wages paid, and the good treatment received, should have the effect of removing these fears and suspicions, so that compulsion may not longer be necessary and free voluntary labour take its place
>
> The question of the measure of compulsion which is admissible or advisable in order to induce the African to work, solely for his own moral and material benefit and advancement, is one which belongs rather to the subject of education than to that of labour" (*The Dual Mandate*, 411)

The Geneva Convention on the Recruiting of Indigenous Workers, adopted by the International Labour Conference in 1936, was an attempt to regularize the position. Before permitting recruitment, it would require the competent authority to take into account the effect of the withdrawal of native labour on the social life of the village It would strictly check the employment of coercion, or the use of chiefs and native authorities as recruiting agents It would prohibit the employment of children and young persons except on light work and only with the consent of their parents, and under strict safeguards Adults recruited under such conditions should be accompanied by their families. The Convention received general support at Geneva, but it has not yet been ratified by any African Power.

RACIAL DISCRIMINATION

In this chapter we have seen how the attitude of the white man to the black is still profoundly influenced by the centuries-old tradition of slavery. The black man is regarded as inferior and fitted only for the unskilled work. Disparity with respect to standards of living, social institutions, language, traditions and customs and beliefs has also encouraged the view that the superiority of the white civilization should not be tarnished by too close association with native peoples. In South Africa such views have crystallized as a rigid caste system, which decrees that blacks must never aspire to higher education, skilled work within the framework of modern industry, freedom to travel by the motive power of their own limbs without an official pass, still less to own or drive an automobile

The economic policy of the Union of South Africa and of Southern Rhodesia assumes what the official Nazi doctrine asserted later, a separation of labour into classes based on race In its origin this distinction rested on a different level of social education, and it is still generally true that a wide economic and educational gulf separates white and black No one disputes the existence of this gulf What is at issue is the attempt to perpetuate an economic and educational distinction on a racial basis *en rapport* with the policy of Hitler's new order. As far back as 1904 the Transvaal *Labour Importation Ordinance* gave official sanction to this state of affairs. The Mines and Workmen's Amendment Act of 1926 gave full statutory approval to the "colour bar," despite the repeated pronouncements of expert commissions for many years past and the wholehearted opposition of native interests The Act of 1926 authorized the grant of certificates of competency to Europeans and certain classes of "coloured" persons, but natives were specifically omitted. From all opportunity of self-advancement they were excluded. They are to remain unskilled, while all the skilled and higher paid tasks are assigned to white men. Where this law does not locally apply, white trade unions impose restrictions which, in effect, amount to a colour bar in most skilled trades

Penal sanctions are still attached to labour offences in most British territories. The offences penalized may be breaches of agreement, injuries done to the employers' interests, infringements of safety regulations or failure to comply with sanitary and public health codes. A breach of contract is a criminal offence and the native is liable to imprisonment or to the payment of a heavy fine amounting sometimes to more than a year's wages. The legislation gives scope for wide interpretation. A major offence, says Lord Hailey,

> "seems to include, for instance, neglect of animals in Northern Rhodesia, or the failure of a cattle herdsman to report the death of stock in Kenya and Tanganyika, both being offences to which importance is attached locally."

In Tanganyika regulations are more severe than in Kenya Desertion is a criminal offence and in the case of boys under the age of sixteen corporal punishment can be inflicted to the extent of twelve strokes. In the Union of South Africa, the *Native Service Contract Act* of 1932 legalizes the in-

fliction of corporal punishment on male servants up to the age of eighteen for any contravention of the *Masters and Servants Act*. Restraints on the movement of native labour are embodied in various Pass Laws of South Africa. These were originally designed for police purposes; but have since been used to maintain the supply of labour, to prevent desertion, and to make more effective the policy of segregation The necessity for a native to have a pass restricts his freedom to travel; and, within the urban areas of the Union, prevents his movement from one job to another. The *Native Service Contract Act* of 1932 which operates in the Transvaal and the Orange Free State makes it compulsory for a native to have a pass before proceeding to any place other than his home, and no one is allowed to engage a worker unless his pass bears an endorsement of the owner of the farm where he is resident authorizing him to seek fresh employment. Such pass laws are not confined to the Dominion of South Africa. They exist under British rule. In Kenya, no native can secure employment without having his pass endorsed by his previous employer and without having his permission to leave.

These various enactments are enforced by social conventions, which have been as binding as the most strictly applied regulation A leading African, D D. T. Jabavu (*The Black Problem*, 1920, quoted Buell, i, 68) writes:

> "Socially speaking, the black man in all public places is either 'jim-crowed' or altogether ostracized In stores he has to wait until all whites are served, in public offices he is bullied by officials, in markets his stock and produce are by tacit agreement earmarked for low prices, his sugar cane is not accepted at the Zululand mills, evening curfew bells restrict his freedom of movement among his friends and he is cut and snarled at throughout his life.
>
> In railways he is at the very start of his journey buffeted by booking clerks; in the goods shed he is unnecessarily anathematised in language that cannot bear repeating, his waiting rooms are made to accommodate the rawest blanketed heathen; and the more decent native has either to use them and annex vermin or to do without shelter in biting wintry weather "

Our narrative of British Imperialism has been written during a second world war, when the issue of a conflict to decide the success or failure of Hitler's project for a Nordic Empire based on racial discrimination was still uncertain Meanwhile there has been much talk at home of a new deal for the African native, as befits our professions as champions in the crusade against the Nazi doctrine We proclaim our faith in freedom and democracy The military defeat of Hitler has been accomplished, but the defeat of Hitler's ideology is less certain The Union of South Africa in which the ideology of racial discrimination had taken shape as a legal system before National Socialism came to power in Germany, has been our enthusiastic ally, but we have yet to know why South African nationalism renounced its former partiality for the Nazi regime and gave its support to the policy of Smuts. Of this we may be certain. South Africa remains solid in its determination to perpetuate its own caste system, and alert as ever to the community of interests which binds the Dominion to the white settlers of Kenya, the Rhodesias and Tanganyika. The Government of the Homeland has no further responsibility for the course the Dominion of South Africa

chooses to pursue to her own lasting shame; but the Government of the Homeland cannot renounce authority for the native policy of those parts of Africa which are still British colonies. The issue British citizens will have to decide in the near future is whether their Government will succumb to South African pressure for a pan-African white settler policy to perpetuate racial discrimination, or initiate a new era of education and social security to incorporate the Africans, by timely measures, as free citizens within the framework of a free society in an age of potential plenty for all men If South African pressure prevails, the military defeat of Hitler will have been a moral victory for the Nazi ideology on the African continent.

PART V

Our Institutions

CHAPTER XIX

GOVERNMENT

So far we have had little to say about political institutions as such. Our concern has been with human needs which political institutions should subserve, amenities they should promote and resources they should safeguard We have directed our attention to man's enlarging comprehension of his own needs, man's expanding knowledge of means available for satisfying them and the role of different segments of social personnel in the accomplishment of changes which have brought health, leisure and plenty within the reach of all. The changes we have studied are not such as affect the Homeland only They involve a world-wide economy.

The recognition that this is so, is an indispensable prerequisite to intelligent understanding of modern political issues There is no permanence in political institutions. They change as the functions they are called on to carry out themselves change under the impact of new technology and new human aspirations generated by new powers and inventions. The parish used to be an important unit of British political administration and is no longer so Other units of local government are becoming obsolete, as they prove inadequate for the administration of public health, electric supply or modern transport, and the new conditions which have forced on government functions unforeseen when existing instruments of administration came into being now call for changes of the political structure of the world as a whole In a world dependant on foot and horse transport, political units are of necessity small and isolated one from another As economic life expands, as more efficient means of communication become available, the scope of government expands and boundaries assigned to it alter.

The need for readjustment arising from this inexorable fact has two facets We have to explore what functions of administration can be usefully assigned to units of government co-ordinating the needs of small closely-knit communities, and what functions of government involve the interests of large areas of the earth's surface or even the whole of the planet on which we live. A great intellectual obstacle to lucid thinking about this pivotal political issue of our own generation is the doctrine of national sovereignty, which admits no authority transcending that of the nation state. The doctrine that the nation state is fitted to be the sole arbiter of its economic and cultural policy is wholly out of touch with the realities of modern government, embracing such diverse functions as education, electrification, broadcasting and transport of goods. Some of these functions, such as the first

named, have to take cognizance of the languages people speak, the religious beliefs they profess and traditional sentiments transmitted in a literature they share. Others arise from available water power, the course of rivers or mountain ranges and the existence of natural harbours. The boundaries which separate nation-states may separate communities with similar, or bring together communities with different folk-ways They may separate people with access to the same natural resources or unite people who derive their means of existence from different ones.

In short, the delimitation of the nation-state has arisen in the course of centuries from circumstances which have little to do with the most urgent tasks which modern government embraces. To a large extent, states owe their existence to considerations of military strategy, before military strategy had any prescience of the jet-propelled plane, the flying bomb or the stratosphere rocket. The applications of modern technology in warfare have now made the organization of world government a necessity of survival, and belief in the nation-state as the ultimate source of political authority has thus become a menace to mankind. The supreme intellectual task of our time is to clarify what things men and women can best do together in larger and in smaller units of authority than that of the nation-state, without regard to the circumstances which settled national boundaries in the past, if these circumstances have no relevance to modern needs. With this end in view, we shall now survey the history of government at different levels, starting with the smallest unit within the Homeland itself.

THE PARISH

For many centuries the parish was the main unit of local government because Britain was rural and sparsely populated. The functions of the parish officers as churchwardens or constables, surveyors of highways or overseers of the poor, sprang from the essentially rural and neighbourly character of their communities. No one can be certain how the parish originated, but most likely it grew up around the church, focus of the social life of the community it served. To start with, parishes varied with respect to area and to population. A parish might be a mere handful of families living in a tiny village, or a densely packed area surrounding a church within a walled town. It might cover a few hundred square miles of sparsely inhabited moor or hilly country. It might be a comparatively large aggregation of people in a large city such as London. Sometimes its boundaries cut across frontiers of counties. Sometimes, as in Leeds or Liverpool, they coincided with those of boroughs. In 1689 there were about 9,000 parishes in England and Wales, and in 1835 about 15,635.

In their monumental work on *English Local Government*, the Webbs tell us that there were four principal offices to manage parish affairs, that of Churchwarden, that of Constable, that of the Surveyor of Highways, and that of the Overseer of the Poor. Differing in origin and functions, these offices had certain common attributes. Unlike modern local government appointments, they were unpaid and service was compulsory on all who belonged to the parish. Once elected, the officer was clothed with authority

by Church and State, responsible to the law for due performance of his duties. This obligation to serve was a fundamental principle of local government. The usual term of office was one year The duties were exacting; and no specific test of qualifications was imposed.

The *Churchwarden* was the chief officer. His duties were to see to maintenance of the church fabric, provision of utensils and materials for services and supervision of the churchyard. At stated intervals he was required to report to the "Ordinary," that is the Bishop or his Archdeacon, on the due performance of duty by the incumbent and his curates and, most important, to report on any moral or religious delinquency. Though responsible to higher authority he was essentially the representative of the parishioners, elected by them in a variety of ways determined by custom and tradition in his particular parish. Selection might be in open *Vestry* where the assembled parishioners voted by show of hands, by nomination of the retiring wardens, or by rotation. Sometimes he was appointed by the incumbent The churchwarden was custodian of the parish and trustee of its common property. Its income came from church property, collections, fees and other sources including the church rate, sanctioned by Vestry and supported by ecclesiastical courts Sometimes there was more than one churchwarden, as required by the size of the parish and the burden of duties In the fifteenth and earlier centuries, the *Constable* was also a very important functionary, entrusted as he then was with supervision of beggars and the poor. He had been originally an officer of the manor or possibly of the vill. With the decay of Courts Leet (pp. 475–6) in the seventeenth century, his appointment fell to the Justices of the Peace. The parish was the generally accepted unit of administiation So he became the parish constable, though his authority did not come from the Vestry

Development of capitalism in the sixteenth century created new administrative problems for the parish as well as for the nation. Of these maintenance of roads and care of the poor became the province of the former In 1555, a statute which enjoined six days compulsory labour on the roads from every parishioner created a new task in the parish economy At first this new office was filled by assistants appointed by Churchwardens and Constables. In time the *Surveyor of Highways* acquired a more independent position. An act of 1691 gave the responsibility of his selection, from a list of holders of land or "the most sufficient inhabitants," submitted by the parish authorities to the Justices of the Peace His duties included repair of roads, supervision of statute labour and submission of reports and accounts to Justices in Quarter Session who had authority to levy a Road Rate. Another new office was that of *Overseer of the Poor*, established by statute in 1597 Though appointed by Justices of the Peace, Overseers had to work closely with Churchwardens, associated with them by law in administration of poor relief In theory they were "substantial householders of the parish," and in a task so intimately affecting the lives of their neighbours they could rule only with consent and approval of the parishioners, though not elected by them. Like Churchwardens and Constables, Surveyors of Highways and Overseers of the Poor were unpaid and held office for a year. All parishioners were liable to serve in turn.

In Scotland, as in England, the parish was the unit of local administration. Scotland was more rural than Tudor England and the communications then available made social cohesion over anything but comparatively small areas impossible Even more than in England, the Church was the centre of parish life. At a time when relief of poor had became a secular duty under Elizabeth's government, the Church of Scotland increased its hold over local affairs. The Presbyterian form of Church government favoured such control The Kirk Session, a sort of committee of the congregation, presided over by the parish minister, became an executive body charged by Statute in 1570 with relief of the poor Down to 1845 they were in fact the rulers of the parish. Their functions extended over every aspect of people's lives, religious, moral and civil. They helped the needy poor, not from a poor rate but from church collections. They punished parishioners guilty of breaking the Sabbath, and dealt with moral and religious delinquency, including the detection of witchcraft. Such was the social setting in which beliefs about the scriptural credentials of church governance were inextricably intermingled with political controversies concerning the proper form of secular administration.

THE COUNTY

Beyond the parish and of more stable contour was the county. How early the United Kingdom was divided into counties is uncertain, but from the time of Henry VIII, England and Wales comprised 52 counties, varying in size from Rutland with 150 to Devonshire with its 2,600 square miles. The central figure was the *Sheriff*, the King's representative, military leader, tax collector and judicial officer. In South England and Scotland he was pre-eminently a royal officer and not responsible to the people over whom he exercised authority By the seventeenth century, though still an officer of considerable power and influence in the county and charged by law with responsibility for a multitude of duties, his real business was judicial and the ancient county court over which he presided, aided by a local jury, had surrendered most of its traditional functions to the newer *Justices of the Peace* In the county, as in the parish, tradition and custom played a notable part. The *Lord Lieutenant*, usually a peer or great landowner, whose office dates from the middle of the sixteenth century, was in command of all the armed forces of the county, but his military duties dwindled in importance as county musters fell into disuse owing to establishment of standing armies Thereafter he remained only as a figurehead.

In county affairs, Sheriffs and Lord Lieutenants were of far less importance than *Justices of the Peace.* Established first in England by Edward III and in Scotland by James VI, these dignitaries had become rulers of the county in Tudor and Stuart times. They were chosen from the landed families, the only qualification being ownership of a substantial estate Soon they acquired a multitude of new duties, building bridges and jails, managing houses of correction, and fixing wages and prices. Almost the entire civil administration of the county was entrusted to them. There was no clear-cut division between their administrative and judicial functions. They might

act separately or jointly or, for more important purposes, in general sessions held quarterly, and hence known as *Quarter Sessions* In theory the whole county was supposed to attend as in the medieval county courts of the Sheriff, but in practice a jury represented the people to assist the Justices with knowledge of local affairs.

Justices were appointed by the King; and they enjoyed great latitude in carrying out their duties. As the Webbs put it, they "felt themselves at liberty to administer the local affairs as they thought fit." It is estimated that there were 2,500 of them in 1650 and 3,000 in 1689, but many were content to hold their commissions without serving on the Bench. Maybe no more than one-third of them were active. Personnel selection was based on ownership of land. Between the Revolution and the death of Anne, some justices did come from lower ranks in society; but the principle of land ownership was jealously maintained throughout the eighteenth century. "In this Kingdom," writes an indignant pamphleteer of 1748, "any booby is invested with the ensigns of magistracy, provided he has as many acres of land as are necessary to qualify him under the Act . . . Thus, they are nominated by dint of estate, or ministerial influence, without any regard to their knowledge, virtue or integrity. . . . After this manner in every County we have ignorant petty tyrants constituted to lord it over us, instead of honourable, ingenuous, upright, conscientious, learned and judicious magistrates." The landlord thus became the rural tyrant, albeit at times a benevolent tyrant, like Sir Roger de Coverley As industrialism advanced, landed people, anxious to maintain this supremacy, too often made county business exclusive by adopting the practice of co-option and by conducting proceedings behind closed doors. By 1835 only a proportion of county affairs was open to public inspection.

THE MANORIAL COURT

Till the eighteenth century both England and Scotland were predominantly agricultural Then farming methods were essentially communal, with open fields, intermixed strips and common rights. Thereafter, till the introduction of war-time controls, a farmer was the arbiter of the management of his own farm. This was not so in earlier times, when farming depended on co-operation among numerous tenants The *Manorial Court*, in its two chief forms of *Court Baron* and *Court Leet*, was the instrument whereby tenants and landlord settled the many problems of a society in which individualistic farming was impossible. This medieval Court Baron was primarily concerned with problems of cultivation, service to the lord, and transfers of holdings The Court Leet dealt originally with criminal offences; but the differentiation of function was rarely clear-cut. Manchester, with its "Court Baron of the Manor of Manchester" and its "Court Leet and View of Frankpledge held in and for the Manor of Manchester," was a notable exception.

In the seventeenth century there were innumerable manorial courts, concerned with the agricultural life of the small communities they served and with breaches of the peace. The Court nominated officers for various tasks.

As Baron Court it appointed haywards, swineherds, surveyors of hedges and the like, as Court Leet ale-tasters, pinders, pound keepers, dyke reeves, burleymen and sometimes inspectors of weights and measures. Social obligation was still an accepted principle of everyday life in a rural community. So service in such offices was compulsory and unpaid. The lord himself or his baron bailiff presided and the court officers were chosen from the country folk concerned. In earlier times there had been a jury to declare the customs of the manor; and the lord, himself influenced as much by custom as his tenants, usually acquiesced in their findings By the eighteenth century the lord was a judge and the jury had faded out of the picture; but the manorial court still survived as a unit of local government, clothed with authority derived neither from Crown nor Parliament but from the folk ways of the people.

In the days of Queen Anne, manorial courts, though numerous and ubiquitous, were being gradually superseded by other forms of social organization. Commons and open fields were enclosed, as individualist farming replaced the communal system Copyholders and customary tenants made way for leaseholders So the enclosure movement did away with the main business of the Baron Court. As Court Leet, the manorial administration was surrendering its responsibilities to the Parish Vestries, to the Justices of the Peace and to new Statutory Authorities, such as *Turnpike Trusts* and *Commissioners for Paving*.

MUNICIPAL CORPORATIONS

Town government started in England with a bewildering variety of forms. One type was the *Manorial Borough*. These, as the title implies, had grown up on estates of lords. They began as villages, which sought independence and freedom, as their social activities increased, from the jurisdiction of the lord of the manor. Some secured complete self-government. In others the lords' control remained paramount, and between these two extremes there were innumerable gradations As enclosure replaced common by individual ownership, the main function of their local administration—the management of common lands—disappeared. Meanwhile the expanding authority of Justices of the Peace and the establishment of statutory authorities for roads, sewers and the like superseded what remained

Much more important were the *Municipal Corporations*. In 1689 there were about 200 of them in England and Wales. In many cases they owed their privileges to Royal Charters As with parish and county, their rule was based on immemorial right and custom, and local usage was more important than legal constitution. In fact, the Municipal Corporation was an association of people for common ends. It represented the interests of craftsmen and traders, shopkeepers and merchants. So it was an association of *producers*, as the Parish Vestry was an association of tillers of the soil. The Municipal Corporation administered lands, markets and trade within its own bounds, collected market fees and rates and broadly administered the affairs of the community. Its most prized privilege was exemption from the rule of county authorities The Sheriff had no jurisdiction there and

the County Justices of the Peace were either partially or wholly excluded The Corporations could appoint their own Justices and endow them with all the powers elsewhere given by the Commission of Peace.

These Justices could act singly, in Petty Sessions or in Quarter Sessions, and were more independent than their county colleagues for they could not be removed by the Crown. The function of creating a magistracy, say the Webbs, was "the most potent of Municipal Franchises" Originally the Municipal Corporation, like the parish or the county, was primarily an organ of obligation, through which burgesses organized and managed the various services demanded by their community By the eighteenth century many of their original obligations, such as defence or payment of an annual rent to the Exchequer, had become attenuated or had entirely disappeared Maintenance of the poor had been taken over by Overseers and many of the special services, such as paving and lighting, had passed into the hands of new Statutory Authorities. Administration of justice and general management of the towns became more and more vested in the magistracy, whose duties were extended by the State in the eighteenth century

"The Borough Justices," say the Webbs, "besides sitting on the judicial Bench, silently developed into an important legislative and executive authority for their town, more or less distinct from the Corporation as such, tending to become, in fact, an influential private committee of the little group of leading members of the Corporation, which in nearly all matters wielded in the Borough the real power of government" (ii, 390).

In the fifteenth century freemen were identified with the crafts and trade of the town. Three centuries later the deepening gulf between employer and employed destroyed this homogeneity of interest. So long as craftsmen and traders were the bulk of its population, town government approximated to democracy. By the eighteenth century, increased authority of the magistracy had vested power in a small group who maintained supremacy by varying forms of recruitment while the importance of the general body of burgesses or freemen steadily declined At the English Revolution freemen constituted a large element in most important boroughs By 1800 they were a mere handful, often non-resident and mainly interested in returning a member to Parliament. New economic conditions had neutralized the old cohesive forces

THE SCOTTISH BURGHS

In Scotland the drift to exclusiveness in town government was even more manifest Originally there was popular election, and the right of the citizens to appoint their own magistrates was prized highly, as in England, but early in its history merchants of Scotland organized in *Guildries* played a dominant part in municipal administration They gradually excluded craftsmen from any important share in town government. Parliament, to which the *burghs* sent representatives, reinforced this exclusiveness in 1469 by enacting that the retiring council should elect the new and that the old and new at joint session should appoint the town officials. This remained the basis of Scottish town government till 1833.

In Scotland there were three well-defined types of burghs: *Royal Burghs*, *Burghs of Regality* and *Burghs of Barony*. The first were the most important. All of them had received charters from the Crown at an early date; and being the chief towns of Scotland they were able to secure Parliamentary sanction for their monopolistic tendencies They had the sole right to engage in foreign trade and their organization, called the *Convention of Royal Burghs*, was an important body controlling foreign trade and exercising considerable political influence on the Scots Parliament in Edinburgh. The *Burghs of Regality* were chiefly situated on church lands and were few in number. The *Burghs of Barony* were new towns, mostly dating from the sixteenth and seventeenth centuries, with privileges accorded by charter from the landlords on whose estate they were located. In their efforts to secure independence they had to overcome much opposition from the Royal Burghs which claimed to exercise trading rights over large areas (Fig. 97).

In all these towns the governing bodies became close oligarchies. The powers they exercised were very extensive—maintenance of law and order, sanitation, justice, care of the poor, education and finance. Their control was limited to a certain extent by the overriding power of the Crown with respect to justice, by the control of Guildry and *Incorporated Trades* (craft guilds) over the trade and crafts and by the established right of the Church to oversee education, public morality and relief of poverty Accommodation with these rival authorities was readily reached because there was often overlap of personnel Magistrates were usually members of the Guildry They might also be Justices of the Peace and so constitute a Justices Court, or be elders of the church and so function as the *Kirk Session*

LOCAL GOVERNMENT AND THE INDUSTRIAL REVOLUTION

In the eighteenth century the prevalent view was that the central government should not interfere in local affairs. It might impose new duties on Justices of the Peace or create new authorities. Otherwise local personnel was left pretty much alone to manage affairs in its own way. The century-old principle of "obligation to serve" was still extant. Any parishioner or ratepayer might be called on, either by election or rotation or co-option, to fill one or other of the onerous parish or borough offices Many of the units of local government had started as associations of people for common purposes. The manorial court or the parish had served the interests of tillers of the soil, and the borough had arisen to serve the interests of craftsmen and traders. Growth of population, the enclosure movement, and development of manufactures had made havoc of their democratic traditions till they had become oligarchic bodies which jealously safeguarded the interests of privileged groups, recruited themselves by co-option, and drifted more and more apart from the interests of the community at large. By the beginning of the nineteenth century three-quarters of the municipal corporations in England and most in Scotland had become close bodies, neglecting their public duties and failing to promote community interests There were a few exceptions, the most outstanding being Liverpool.

The old system of local administration had already become unworkable

and out of touch with social conditions, when the rise of industrialism made it chaotic and eventually obsolete. Close vestries with their unpaid, unskilled churchwardens and overseers of the poor were quite incapable of handling the problems of parishes where mining and manufacturing had created new centres of population. If manorial courts continued to exist the manufacturing classes ignored them as irrelevant to the new requirements of a machine age. The borough corporations were subject to new strains for the same reason. Population had increased. Social needs had enlarged the scope of old problems and created new ones The problem of poverty, comparatively easy to manage when applicants for relief were few, increased vastly as enclosure and industrial change swept the country. Voluntary overseers could no longer cope with a situation which demanded specialized knowledge and efficient discharge of duties. New problems of sanitation, water supply and public health called for expert knowledge and resources beyond the capacity of the old forms of government.

The urge to reform came partly from the problems that awaited solution, and partly from conflict of pressure groups Having achieved economic power, manufacturers were not prepared to submit to the supremacy of Tory landlordism in central and county government, or acquiesce in the oligarchical government of the boroughs. Meanwhile the working classes were becoming politically conscious through the closer contacts of the factory. There was thus an articulate claim for participation of the common people in local affairs. In the background of this unrest there was the ideological ferment of the American Declaration of Independence, of the French Declaration of the Rights of Man, and of the new social philosophy known as *Laissez-faire*

The basic principle of this creed was that individual self-interest, unhampered by restrictions, automatically promotes social good. Every law must thus be judged by asking: how far does it promote conditions of freedom for the individual? Regulations which fail to pass this test must be replaced by new ones adapted to new social conditions, and constantly reviewed in the light of changing circumstances Utilitarian propaganda discredited custom and common law on which local administration had hitherto rested, and introduced a new viewpoint. If the greatest happiness of the greatest number was the goal of social legislation, regional groups, whether of town or county, should not enjoy too much latitude. There must be strong central administration to eliminate inefficiency, to check corruption and to promote the social good. In this mental climate a new era of local government began in the thirties. Its underlying principles were election as the basis of a democratic franchise, appointment of competent administrators, and close supervision by central government Reform of the poor law illustrates the new trend. A first measure of the reformed House of Commons was to appoint a Royal Commission to inquire into poor relief, for the high parish rates had alarmed the middle class. The Poor Law Amendment Act of 1834 was based on its recommendations. Vestries and overseers were replaced by elected *Boards of Guardians* for groups of parishes and a central authority was established in London to see the Act put into operation. The Poor Law Commissioners, appointed for five years in the first instance, were re-

appointed, and in 1847 became the Poor Law Board. In 1871 this work was taken over by the Local Government Board.

By the transference of poor law administration to Boards of Guardians, the parish lost its most important administrative function. The *Local Government Act* of 1894 attempted to restore its authority by establishing elected parish councils, but their limited rating powers greatly restricted the effective use of their powers. Meantime similar reforms were taking place in Scotland. Till this time administration of poor relief in rural districts had been vested in ministers and kirk sessions. In the towns it was the responsibility of the burgh councils, though there too the work was done mainly by the church authorities An Act of 1845 gave this power to Parochial Boards, elected partly by rate-payers and partly by kirk sessions and heritors. Over all there was a Central Board of Supervision. Contemporaneously the powers of municipal corporations were overhauled. In Scotland an Act of 1833 established town councils elected by owners or occupiers of premises worth £10 a year. Two years later, the *Municipal Reform Act* provided for England town councils elected by all rate-payers This Act affected 178 boroughs and 2m. people The new corporations were allowed to take over the duties of improvement commissioners and statutory authorities which managed streets, drains, lighting and the like. This power was permissive only, and no great result followed. In 1848, when the first *Public Health Act* was passed, only 29 boroughs had assumed these powers; but the menace of epidemics (typhus and cholera) acted as a spur to collective enterprise

None the less, progress was slow till the turn of the century. In some towns paving, lighting, cleansing and draining were carried on by corporations, in others by improvement commissioners, or by vestries or some combination of authorities. Public enterprise was greatly stimulated by the *Reform Act* of 1867. This applied to municipal as well as to parliamentary elections. Extension of the franchise replaced narrowly based councils or cliques by vigorous elected bodies. The city of Birmingham, with a radical tradition, set a good example and served as a model. Within three years' active work, according to Chamberlain, it was "parked, paved, assized, marketed, gas-and-watered, and improved." Thus endowed with sufficient powers to serve their social needs, municipal authorities rapidly tackled new problems of communal living created by industrialism—sanitation, water supply, public health, supply of gas, transport, and—in a smaller way—slum clearance and housing Still, the day of *ad hoc* bodies was not yet over. Poor law administration was an independent system and the Education Act of 1870 established School Boards

Till late in the century little had been done to change the character of county government. In England, Justices of the Peace, and in Scotland, Commissioners of Supply, remained an aristocracy with privileges out of step with the democratic movement. Between 1888 and 1894 the old machinery was replaced by elected county councils and parish councils. Thus the whole of local government now rested on direct popular election. One outcome of the *County Councils Act* was the creation of the London County Council, which took over from innumerable bodies the common



FIG. 113. THE DUNCE
(*Turner*, The Cowslip, 1811)

Elizabeth Turner poured ridicule on this method of making the pupil look and feel ridiculous before her class fellows, but it retained an assured place in educational practice till comparatively recent times
(See p 532)



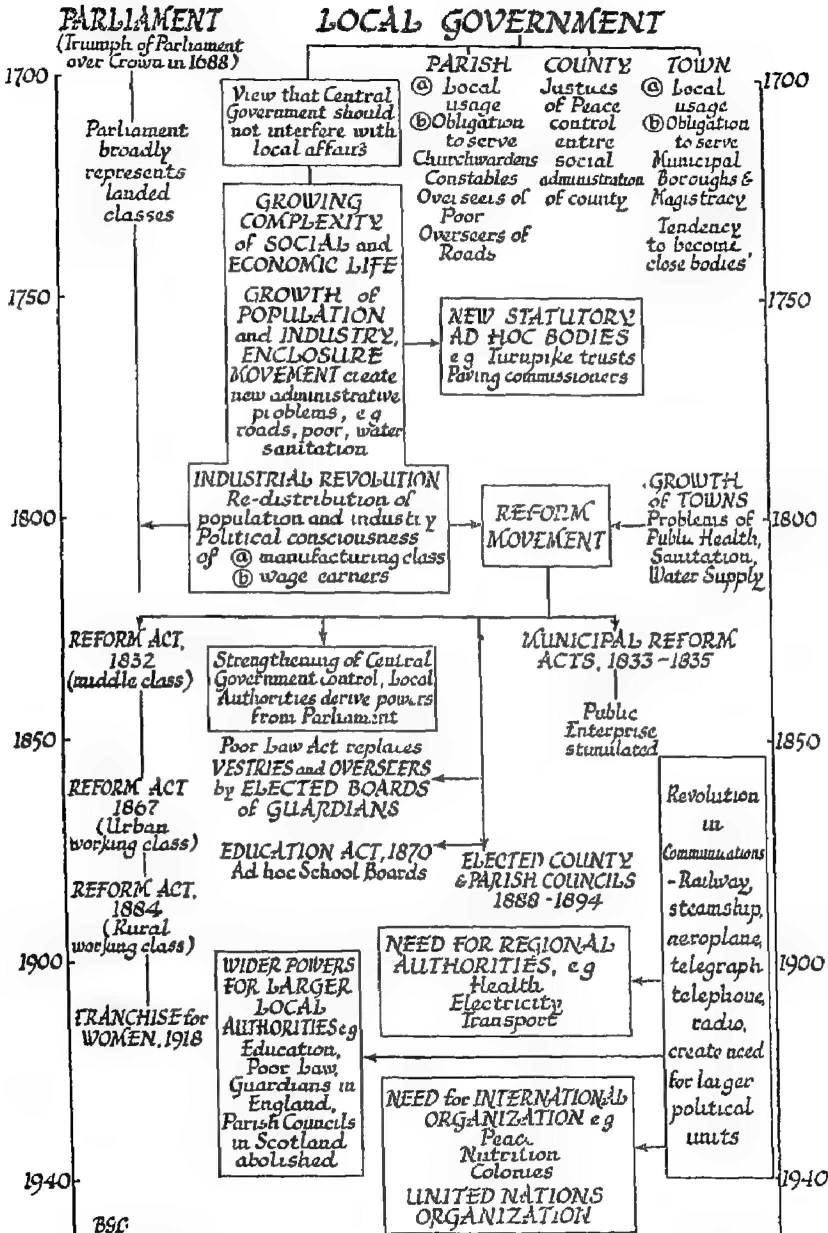


FIG 114 *Above* WITCH-FINDING TRIAL BY WATER
Below THE DUCKING STOOL FOR SCOLDS

(*Phillips and Tomkinson,* English Women in Life and Letters, *by permission of the Clarendon Press, Oxford*)

The trials here shown were largely the work of a credulous and ignorant people But even enlightened and learned men, like Sir Thomas Browne and Addison, were not convinced that belief in witchcraft was wrong The Acts against witchcraft were not repealed until the reign of George II "The popular charms against diseases and misfortunes which are still remembered in remote country places are an interesting relic of the powers once ascribed by a superstitious people to the old witches of England "

(See p 561)



TIME CHART 21 THE CHANGING STRUCTURE OF GOVERNMENT

services of paving, cleaning and public health Since then the major changes in English local government have been the incorporation of poor law administration and education within the framework of municipal and county government. Thus pre-existing *ad hoc* instruments of local government have been largely absorbed by county and borough authorities, but new units of administration for specific ends have come into being, and we are now witnessing the creation of regional authorities to take over responsibilities for which the single county is too small a unit of government.

In Scotland the parish council ceased to exist after 1929. In England its responsibility for the upkeep of roads has been greatly curtailed by the demands of new transport facilities, and its functions are altogether trivial within the framework of authority exercised by the Rural District Council. The five main units of English local government at the present time are County Councils, County Borough Councils, Municipal Borough Councils, Urban District Councils and Rural District Councils. There are 60 County Councils, including London, 538 Rural District Councils, and over 7,000 Parish Councils In addition to 83 County Boroughs, 278 Municipal Boroughs and 697 Urban Districts outside the County of London, there are 28 Metropolitan Boroughs, and the City of London, which has its own Common Council

The County Council exercises authority over a whole county outside the precincts of a county borough within it. At the outset, its major responsibility was confined to the upkeep of roads and to sanitation. In 1902 *ad hoc* school boards were abolished in England and their functions were taken over by the County and County Borough Councils. Thereafter education became one of their major commitments. In 1918 Scottish local school boards were superseded by *ad hoc* education authorities for single counties and for the burghs of Glasgow, Edinburgh, Dundee, Aberdeen and Leith. In 1929 standing committees of the County Councils and of the burghs mentioned, with the exception of Leith, took over their functions In the same year, the abolition of the *Boards of Guardians* was accomplished by the transference of their responsibility to the County Council; but present proposals (1946) for a new system of Social Security will eliminate the bulk of its commitments in connexion with public assistance The abolition of Poor Law Guardians in 1929 extended the scope of the responsibility of County Councils for public health. Thus the London County Council found itself responsible in 1930 for the administration of 76 hospitals with accommodation for 42,000 patients and a staff of 20,000. These responsibilities will also be curtailed if proposals for setting up regional authorities take effect in accordance with the legislative proposals of 1946. Meanwhile the Central Authority of the Ministry of Transport has made considerable encroachments on County responsibilities for the upkeep of roads and bridges.

County Boroughs, as created in 1888, were towns with a population of over 50,000. Being exempted entirely from the jurisdiction of the County Council, the County Borough Council has similar powers and others peculiar to the needs of built-up areas, being concerned with education, public health, public assistance, roads, bridges, parks and libraries. Like the County, the County Borough has responsibility for administration of

criminal justice through the police court, petty sessions or courts of summary jurisdiction. The *Probation of Offenders Act* 1907, followed by the creation of juvenile courts in 1908 "to have regard to the welfare of the child or young person," has extended the scope of this responsibility to supervisory measures.

Thus powers of English District Councils (Urban and Rural) or of Municipal and Metropolitan Borough Councils differ from those of County Boroughs in so far as they do not extend to justice or public assistance. For these, as also for certain public health activities (lunacy, mental deficiency, tuberculosis) and for secondary education, the county is responsible. By the end of the nineteenth century some District Councils and Boroughs had secured powers to supply electricity. County Councils exercise control over all these local authorities, with power to alter boundaries, increase the scope of their activities within certain limits, and, if necessary, act in default. In Scotland, four cities, like the English County Boroughs, are exempt from County control. Nineteen other *large burghs* of at least 20,000 inhabitants have similar powers, except in so far as the County remains responsible for education. The powers of 178 *small burghs* tally with those of English municipalities and Urban District Councils.

The powers of local authorities are granted by Parliament, defined in General Statutes, and alterable only by the consent of Parliament or by Order in Council. They may be obligatory, permissive or conditional on sanctions vested in central administration (e g. Ministry of Health) and higher local authority (e.g. the County Council) By special Acts of Parliament local authorities have extended their activities far beyond their original obligations, so that provision of gas and electricity, trams, town planning and slum clearance have come within the province of a very large number of local bodies. The assumption of trading activities has been vigorously opposed by vested interests, but limited powers of trading have been granted to individual councils. The City of Birmingham has its own savings bank

Within the County of London two *ad hoc* bodies have come into existence during the present century. One is the *Metropolitan Water Board*, created in 1904 to take over from joint stock companies the supply of water. Another public utility of common concern to all Londoners is transport. Before 1933 the transport of the metropolis was largely in the hands of private companies, which jointly exercised a monopoly. The *London Passenger Transport Board* created in that year took over the existing capital of all private concerns, on an undertaking to pay a fixed rate of interest and became responsible also for the management of the publicly owned tramways Shareholders in private concerns (buses and underground) ceased to be owners and became creditors with no say in the conduct of the Board, consisting of a chairman and six members appointed as prescribed by the Act which created it

Outside London the outstanding example of a new *ad hoc* administrative device is the *Central Electricity Board*, set up by an Act of 1926. Before 1914 the radius of electrical supply had been limited by the use of low-tension cables, to areas smaller than a small county. By 1918 distribution over areas

embracing several counties or parts of counties had become a technical possibility. An Act of 1919 set up regional bodies covering areas deemed most efficient for purposes of supply, with the Electricity Commissioners acting as a co-ordinating body The Act of 1926 established the Central Electricity Board with a view to nationalized distribution of electric power by a grid system fed from local stations under public or private ownership

The extension of the activities of local government has entailed a vast expansion of expenditure. In 1873–4 the total sum spent by all local authorities in England and Wales was £29m. In 1928–9 it was £414m. Part of this comes from taxes raised on property owners, roughly assessed by the rent of house or land property. Such powers of taxation are prescribed within narrow limits, specifically defined by Parliament, and a large part of the burden of expenditure falls on the central exchequer. In 1873–4 the rates provided 60 per cent of local government expenditure in England and Wales, in 1928–9 only 25 per cent.

PARLIAMENT

Local government arises out of the social requirements of small communities The nation and its means of government arise when the common interests of larger regions become articulate. In the medieval set-up the king was a baron somewhat stronger than his fellow barons, over whom he exercised uneasy authority. If he hoped to maintain his position he had to take account of their wishes and their interests The barons, on their side, represented a powerful pressure group drawn together by common interests, military and political, best able to ensure the exercise of royal authority in their own interests by compelling the King to consult them in a collective capacity. Thus arose the institution of *Parliament*. The feudal assemblies of tenants-in-chief where high politics were "talked" was the forcing house of Parliament Simon de Montfort's council of barons and great churchmen, summoned to Oxford in 1258, was one step in this evolution. At first there was no system of selection. Soon it became the practice to summon an assembly of two or more Knights elected in each shire court to represent their county In the Parliament of 1265 there was a new element. Chartered boroughs each sent two representatives. This set a precedent for all subsequent Parliaments (Fig. 98).

As yet there was only one House presided over by the King or his Chancellor sitting on the woolsack, symbol of England's great trade. Besides officers of state there were barons, lay and spiritual Very humbly in the background were the representative knights and burgesses summoned through the county Sheriffs. In England the alliance of lesser landed people and merchants, fortified by intermarriage and the law of primogeniture which compelled younger sons of noble families to seek their fortunes in trade, brought about a unity of interest and early established for the Commons a significant role in the government of the country The House of Commons had its origin in unofficial meetings of knights and burgesses to discuss behind closed doors what attitude to adopt on major political issues. Their mouthpiece was the Speaker, who "spoke" for the Commons in full Parlia-

ment. This twofold separation of Lords and Commons was distinctively English. Scottish practice followed the Continental system of three estates—the clergy, the nobles and the burgesses The Scottish Parliament also had its beginnings in councils of barons to advise the King in their own interests Such councils go back to the thirteenth century, but the first composite Parliament met in 1326, at Cambuskenneth Abbey, when burghers as well as barons attended.

Behind the breakdown of the feudal set-up and the creation of the nation-group with King or King in Parliament in control was the growth of towns and the rising economic power of the commercial classes. As trade expanded, their field of enterprise was no longer the borough Their aspirations came to be increasingly identified with the larger political unit. Since peace and orderly government is an essential condition of economic expansion, the trading classes supported the King's efforts to gain supremacy over his barons. So it was that Edward IV gained unanimous support from the London merchants, who hailed his victory over the barons as sure guarantee of flourishing trade for themselves. Once the process of consolidation had started, it generated the appropriate sentiments. People became conscious of interests common to larger social groups, of their common history and common traditions. New systems of law and administration strengthened national ties, and expansion of capitalist enterprise, involving new forms of investment, more variegated ownership and wider markets, gave stability to the emergent regime The coherence of the nation-group was reinforced by a wave of popular enthusiasm, in large measure a by-product of international and civil conflict. Thus constant threats from England stimulated nationalist feeling in Scotland, transforming personal loyalty to the feudal baron into a larger loyalty to country and countrymen. In England a like sentiment of national unity was fostered by the Hundred Years' War which continued against France till 1453 Baronial wars also encouraged this large loyalty because they exhausted the rivals and encouraged the common people to regard the King as the custodian of social security. Such was the outcome of the Wars of the Roses. Meanwhile, the mercantile classes exploited this sentiment to advantage, excelling in protestations of loyalty and in patriotic fervour.

Both the Reformation and the invention of printing contributed to the same end. The translation of the Bible into native tongues and its distribution through the medium of print established a bond of union between people who used the same tongue. At the same time it weakened their allegiance to the papal authority which transcended the boundaries of the several speech communities of medieval Europe. As the scholarly Latin of the Renaissance displaced the colloquial Latin of the monks, the vernacular came into ascendance as the vehicle of literary, theological and technical expression. Capitalism, urbanism, expanding trade, wars, the printing press and the revolt against the papacy all conspired to encourage nationalist sentiment, which reached fever pitch in the England of Elizabeth, when stage and pulpit reverberated with the exultation expressed in Shakespeare's lines:

This royal throne of kings, this sceptred isle,
This earth of majesty, this seat of Mars,
This other Eden, demi-paradise,
This fortress built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little world,
This precious stone set in the silver sea,
Which serves it in the office of a wall,
Or as a moat defensive to a house,
Against the envy of less happier lands,
This blessed plot, this earth, this realm, this England.
(*King Richard II*, Act II, Scene 1)

By supporting the King against his rival barons and against the papacy the emergent middle class helped to make him an *absolute monarch*, and since the Pope ruled by divine right, the King's authority had to be invested with equal authority to override it In the hands of the throne this was a double-edged weapon, which could be turned against the trading community. The burghers were on the side of the monarch so long as the struggle was against feudal barons, on the one hand, and Pope, on the other. Thereafter their interest lay in curbing the King's own power In the sixteenth century the situation so created encouraged a new brand of secular philosophy, of which Machiavelli in Italy and Bodin in France were notable exponents. Its keynote was the doctrine of national sovereignty.

National sovereignty implies two things. One is the authority of the national State—King or Parliament or King in Parliament, as in Britain—over all its citizens. The other is that individual states, whatever the form of government, are under obligation to no higher authority in any dispute affecting themselves. Each nation-state claims in principle, and the more powerful ones in practice, to be sole judge concerning its economic and foreign policy, and its right to take military action against its neighbours in support thereof. In the sixteenth century this belief was not yet axiomatic. It was still in conflict with a powerful current of conviction in support of the supreme authority of the Catholic Church.

PARLIAMENT AND THE COMMERCIAL CLASSES

Parliament in Tudor times had as yet little power other than what it exercised by virtue of partial control over taxation The supreme organs of English government were the Crown and the Privy Council. The latter was an executive council appointed by and responsible to the sovereign Being a large body it worked through committees and had at its disposal various administrative and judicial instruments, such as the Council of the North, the Council of Wales and the Court of Star Chamber. In the counties the Justices of the Peace did its work (Fig. 99)

This authoritarian regime suited the needs of a country well enough when danger threatened from within and from without. The consolidation of national security under a strong central authority created a new situation. In Elizabeth's reign there was already a movement to enlarge the authority

of Parliament at the expense of the Crown. It became vocal by the close of the century. Mercantile interests complained bitterly of royal interference with trade, and especially against grant of monopolies to individuals with no other object than rewarding a favourite or replenishing the royal exchequer. Elizabeth herself made concessions to the opposition; but her successor, James I, now ruler of the United Kingdom of England and Scotland, was of a less accommodating temper. So the breach between King and Parliament widened. The Stuarts regarded Parliament as an unfortunate necessity for granting supplies; and it was this necessity which strengthened the hand of Parliament during a struggle which extended over half a century. When the Commonwealth was established, in 1649, the House of Commons boldly voted,

"that the people are, under God, the original of all just power . . . that the commons of England, in parliament assembled, being chosen by, and representing, the people, have the supreme power in this nation . . . that whatsoever is enacted, or declared for law, by the commons, in parliament assembled, hath the force of law; and all the people of this nation are concluded thereby, although the consent and concurrence of king or house of peers be not had thereunto." (Quoted Davies, *The Early Stuarts*, 158.)

The outcome of the political struggles of the seventeenth century, culminating in the *Glorious Revolution* of 1688, was to enhance the power of Parliament and to establish a principle that the Crown is little more than a symbol of the ultimate authority vested in Parliament. Such was the viewpoint which Locke attempted to explain and justify in his *Treatise on Civil Government* (1690) Locke's views are the articulate outlook of the middle class of his times when he writes: "the great and chief end, therefore, of men uniting into commonwealths, and putting themselves under government, is the preservation of their property." Government, in effect, is thus a convenience established by people for defence of their natural rights of life, liberty and property. Parliament is the embodiment of national sovereignty; but there must be limits to its power to interfere with the lives and property of its nationals This is what English people had fought for in the seventeenth century In the next century Rousseau elaborated and amplified Locke's thesis Sovereignty resides in the people and government exists to carry out the popular will as expressed by majority rule, which would tally with the good of society as a whole if men were sufficiently educated Thus an important new notion came to the fore, the education of the people for responsible citizenship (Fig. 100).

Such were the political ideas which were germinating in Britain during the half-century before industrialization created new problems both for national and for local government. Movement of industry of itself brought about a radical redistribution of population sufficient to make the old political layout obsolete. At the end of the eighteenth century, Cornwall had 42 borough members and Lancashire only 12. Such great new centres of industry as Birmingham, Manchester and Leeds had no political representation whatsoever. It was unthinkable that the manufacturing class, now holding economic power, would tolerate a political system which gave

such pride of place to landownership New ideas of freedom current at the close of the eighteenth century, therefore, had a fertile soil The Reform Act of 1832 registered a triumph for a large section of the middle class still without the franchise. In 1867 it was extended to the urban working classes, and in 1884 to the rural labourer Universal suffrage took effect in 1918 when women got the vote.

THE AMERICAN BACKGROUND

The teachings of Locke and of Rousseau had taken root earlier in the old British colonies of the Atlantic seaboard, populated by a people dissatisfied with life at home, resentful of petty restrictions on their liberty and despising the social outlook of their compatriots Men and women had left the Old World to start life anew in a country which offered fresh opportunities; and as generation succeeded generation, the individualism of the colonists gathered strength from the conditions under which they lived and worked. At home, the governing classes regarded the colonies as an extension of their own social and economic system, to be managed and taught obedience like a wayward child Parliament and governors imposed restrictions on trade and industry in the interests of British manufactures and merchants. For many years before the final breach economic grievances had been steadily undermining relations between colonists and the home country. Popular discontent on a large scale found expression at the *First Continental Congress* held at Philadelphia in June, 1774.

As yet the colonists had not determined on independence, but events moved swiftly. In April, 1775, the first clash of arms took place, and in May a Second Continental Congress met Even so, a complete break with Britain was by no means decided upon, but the belief that complete independence was the necessary condition of liberty had persuasive advocates, foremost among whom were Thomas Paine, who proclaimed the rights of man, and Jefferson, who adapted the philosophy of Locke to American conditions. The sanction of a government comes from the people Its main function is protection of life, liberty and property. When it infringes men's natural rights people may overthrow it and establish a new government. Such was the essentially English tradition of political thought in the opening words of the *Declaration of Independence*, adopted on July 4, 1776:

> "We hold these truths to be self-evident· that all men are created equal, that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed That whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it."

Jeffersonian democracy was, on the one hand, government based on majority rule, on the other, government which would interfere as little as possible with the people and their property. The territorial limits of government had still to be fixed When the Revolution broke the last ties with

Britain, the administration of individual colonies passed into the hands of revolutionary assemblies of various sorts On the initiative of Congress, plans were prepared for more stable forms of authority, and carried into effect before the close of 1776. The constitutions adopted were not in fact a resounding victory for democracy. Having thrown off the British yoke, Americans were not disposed to put in its place a central executive with power to repeat the disastrous experience of pre-revolutionary days. During the war Congress had directed the campaign; but Congress had little real power, for it depended for money and men on individual states which wanted freedom to manage their own affairs without interference. The end of the war therefore meant that there was no central authority in place of the British crown Not until 1781 did the first scheme of inter-state co-operation, drawn up in 1777, secure assent from the individual states. The *Articles of Confederation*, as the document was called, did little to change the situation. They simply made formal what had been the practice of Congress since its foundation in 1774 It was merely a conference of delegates from each state. It had no control over trade or finance. It had no independent source of income. There were no national law courts. "It was," say Charles and Mary Beard,

> "in effect little more than a council of diplomatic agents engaged in promoting thirteen separate interests, without authority to interfere with the economic concerns of any. In determining all vital questions, the states were equal; each had one vote; Delaware was as powerful as Virginia, Rhode Island the peer of Massachusetts."

By throwing off British control and establishing their own independence, the American colonists set an example to down-trodden minorities abroad and kindled afresh the aspirations of people with like cultural traditions to manage their own affairs. Thenceforward nascent liberal thought equated the struggle for national independence with the struggle for parliamentary democracy, and *self-determination* became an article of liberal faith In part, this was due to the condition of Europe after the Napoleonic Wars. The prestige of Russia, Austria and Prussia had suffered much at the hands of Napoleon's armies, and the ruling powers were determined to forestall a second upheaval and to maintain the peace of Europe in their own way by a four-power pact. The first attempt to unite Europe within a single confedera-tion under the hegemony of the great powers was indeed an attempt to suppress European liberalism With her feet firmly set on the road to industrial power Britain declined to commit herself, and the Holy Alliance became a symbol of reaction, like Hitler's New Order.

Meanwhile the thirteen dissenting states on the American Continent were moving towards a less parochial view of their interests The confedera-tion, ratified in 1781, had much in common with the *League of Nations* No state had given up its sovereignty There was no central executive with authority to enforce its decisions in matters relating to tariffs, currencies and laws which obstructed the flow of trade, without recourse to war or boycott. Inter-state commerce had almost reached a deadlock when Virginia

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invited delegates to a conference at Annapolis in 1786. The objective was a revision of the *Articles of Confederation.* Only five states responded. The leaders of the movement, foremost among them Alexander Hamilton, refused to accept defeat. They renewed the proposal with a more cautiously worded invitation and agenda. All the states except Rhode Island responded favourably. Once in session, the delegates had to come to a decision about whether the conference should restrict the deliberations to amendments of the existing constitution, or should tackle the whole problem of inter-state government afresh, with a view to drafting a new and more workable scheme. It decided on the latter. Behind closed doors, it proceeded with its momentous business. There was remarkable unanimity on the main issue, that there should be a central government to handle inter-state trade and finance, protect property, maintain public order and make peace and war; but since the majority of the delegates were men of property, they were almost equally unanimous that democracy could imperil their interests, unless restrained by safeguards against hasty decisions. The outcome was a bundle of compromises, designed to meet the wishes of opposing sects and to safeguard the propertied class from the under-privileged The ingenuity with which the founding fathers accomplished their task has been a source of admiration and bewilderment to succeeding generations.

The new central legislature was a *Congress* consisting of two houses—the *House of Representatives* and the *Senate.* The former, elected directly by the public, was apportioned among states on a basis of population, in practice white, the members holding office for two years with pay from the federal government. The latter was designed to be a check on its decisions. In Senate, each state was given two representatives, chosen not by the people but by state legislatures Senators were to be at least thirty years of age and to hold office for six years. An Amendment of 1913 declared that senators were to be elected by the citizens of each state on a "general ticket," i e. not by districts but by the whole state. The head of the Executive was to be a President, elected for four years by a special body of electors chosen by the people of each state. The highest authority was to be a Supreme Court, composed of judges appointed for life by the President with the consent of the Senate. "In short," say Charles and Mary Beard,

"the Fathers created a system of 'checks and balances,' dividing the power of government among legislative, executive, and judicial branches with confused and uncertain boundaries."

The original functions of the Federal (Central) Government were few, the chief being regulation of trade (foreign or inter-state) and defence It was authorized to collect taxes for such purposes and was given power to make laws to carry its authority into effect Two features of the federal constitution are of capital importance. First, there was a clear-cut division of function between federal and state legislatures, with recognition that only common interests could be the province of the federal government. Second, there were *checks and balances,* designed to restrain the rising tide of democracy. Finding it impossible to restrict the franchise by a high

property qualification, the founders placed between people and statute book a Senate, a President elected by an *ad hoc* body, and a Supreme Court elected for life by the President. To this day it has loyally defended the interests of property.

Thus the creation of the Republic of the United States was a retreat from the principles of Jeffersonian democracy proclaimed in the Declaration of Independence. Hamilton, its chief architect, was no democrat. He was the protagonist of plutocracy, and the industrial plutocracy of the Northern States remained the protagonists of strong central government For different reasons the Southern States, with a different economic set-up, and the immigrants who peopled the Middle West, stood for greater autonomy of the individual states. The settlers of the vast empty spaces of the continent were indeed the custodians of the Jefferson tradition, and so it is that the terms *Republican* and *Democrat* acquired the peculiar meaning they carry in American politics Oddly enough the political umbrella of Jefferson continued to accommodate the pioneers of the Middle West and the expropriated slave owners of the defeated planter states from the Civil War of 1861–6 till the outbreak of the second world war; but the epithet Republican had ceased to be more expressive than the democratic label. Under the impact of world economic depression the Democratic administration of Franklin Delano Roosevelt had extended the powers of the Republic in teeth of bitter opposition from the Republicans themselves

CHAPTER XX

SOCIAL SECURITY FROM ELIZABETH TO BEVERIDGE

OUR account of the changes of local government during the past century has brought into focus two major commitments of public administration, education and social security, embracing the control of disease. The assimilation of Poor Law and Sanitation within a single administrative framework, with the transformation of the Local Government Board into the Ministry of Health, registers the emergence of an essentially modern outlook on the functions of government, and one which transcends the traditional conflicting claims of social justice and social privilege. We may epitomize it in two assertions. one, that the satisfaction of basic human needs is the yardstick of good government; the other that expanding knowledge of the nature of human needs discloses vistas of unrealized possibilities for rational co-operation between human beings

In this chapter we shall review the machinery of social security, as we commonly restrict the expression to safeguards against poverty arising from limitations of the earning power of the individual at both ends of the span of life, and at all ages by sickness or accident. Any society has to make some provision for the very young and the very old, for the sick and the disabled. In primitive societies it falls largely to the family to make such provision, and in medieval Britain the Church shared with the family and the guilds the responsibility for doing so. The increased importance of economic causes of distress and the declining authority of the Church resulted in the transference of this burden to the community as a whole. The factory system which destroyed the home as an economic unit and the parish as an instrument of government, ushered in an era of cyclical unemployment and urbanization, with concomitant new problems of sanitation and new dangers to community health Thus the social forces which encouraged the glorification of self-help also promoted a notable extension of legislation concerned with social security.

BEGINNINGS OF THE POOR LAW

The origin of such legislation takes us back to the dissolution of the monasteries in the reign of Henry VIII. Till then the almshouses and hospitals of the Church had dispensed charity to those who did not benefit from what protection the craft guilds could guarantee their sick and aged members or their families left destitute by the death of the breadwinner. The Reformation itself coincided with a variety of circumstances which increased the numbers incapable of supporting themselves by their own efforts. In a loosely-knit society with primitive communications, re-employment could not keep in step with unemployment during the economic upheaval accompanying expanding foreign trade, the beginnings of capitalist farming and an influx of silver from the New World. An increase of vagrants, beggars and petty criminals forced itself on the attention of the authorities.

Hitherto it had been customary to regard the able-bodied out-of-work as idle and vicious. The ruling class was therefore reluctant to recognize the existence of unemployment as a social phenomenon. When the State was first forced to intervene, in 1531 and 1536, it turned over the responsibility for relieving the poor to the parish as an agency for *voluntary* collection. The attempt to organize charity on these lines met with little success. Dissatisfied with the action of the central government, some local authorities, notably London, Norwich, Coventry and York, set about solving the problem in their own way, thereby providing the State with instructive precedents. London levied the first compulsory poor rate and organized a system of poor relief through four institutions—Christ's Hospital for children, St. Bartholomew's and St. Thomas's for the sick, and Bridewell for the able-bodied Even so, these institutions could not cope with all the poor. A "great concourse of people of all sorts" flocked to London, and outdoor relief in one form or another became general elsewhere (Fig 101)

When the State took the next step towards inaugurating a national poor law policy, it thus built on the foundations of municipal experience. In 1572 the desirability of a compulsory poor rate was accepted, and in 1576 parish authorities were authorized to establish *Bridewells* or houses of correction for vagrants. The excusably unemployed were to be set to work on materials supplied by the parish Before the death of Elizabeth several other such Acts were passed and all were codified in the famous Acts of 1597 and 1601 These remained the basis of English poor law administration till 1834 They had three basic principles. One was assumption of responsibility for the relief of destitution by the State, i.e the legal claim of the destitute to help One was provision of funds through compulsory levy imposed by the justices of the peace in each parish and administered through local overseers The other was the choice of the parish as the unit of local administration

Henceforth the aged and the sick were to be relieved at home, orphans were to be boarded out and eventually apprenticed to a trade, vagrants were to be sent to the House of Correction, and the able-bodied were to be given work. There were a great many who heartily disliked the poor law and especially the paying of a compulsory rate. Only the necessity "to stay the fury of the inferior multitude" made those charged with the responsibility operate a system so distasteful to the prosperous and, as some thought, so unnecessary. Its successful working in the first half of the seventeenth century was due especially to the strong hand of the Privy Council, without which the justices of the peace would have let the whole system collapse. During the personal rule of Charles I, the Privy Council acted with vigour and with humanity. A Commission set up in January 1631 issued orders and directions containing rules for the efficient administration of the laws. Justices were ordered to confer monthly with overseers of the poor and to send in reports through the Sheriffs and Judges of Assize to the Commission. The Judges in circuit were themselves directed to inquire "What justices of the peace are careful and diligent in execution of these laws and the directions given and who are negligent and remiss." "In all parts of the country," says Lipson,* "the justices actively bestirred themselves, and they displayed

* *Economic History of England*, III, 451

a zeal in the execution of their functions which gives these years a unique aspect."

In 1640 the personal government of Charles I came to an end and with it the authority of the Council; but by this time the system had been hammered into shape in most parishes of England. The constitutional changes following the collapse of the personal government of Charles I and of the administrative activity of the Privy Council deeply affected the national organization of poor relief. Now that the guiding hand of the central government had been removed, greater freedom of action was left to local authorities. From being national, poor relief became parochial Had a wider area than the parish been chosen as the unit of operation, the history of the poor law might have been very different, and the word "parish" would not carry with it associations of poverty and want and degradation. Removal of central direction left almost complete control in the hands of overseers, who were the actual administrators of poor relief. Appointed annually, they were voluntary officials, usually quite inexperienced and ignorant of the social function of their office. Their chief concern was to keep expenditure down and to get through a term of office with as little trouble as possible. An historian of the poor law, who saw this system in full operation in the eighteenth century, declared that in practice the office of overseer

> "seems to be understood to be this. to keep an extraordinary look-out to prevent persons coming to inhabit without certificates . . . to maintain their poor as cheap as possibly they can . . to bind out poor children apprentices, no matter to whom or to what trade, but to take especial care that the master live in another parish, to move heaven and earth if any dispute happens about a settlement, and in that particular to invert the general rule and stick at no expense. . . . To depopulate the parish in order to lessen the poor rate "

THE SETTLEMENT LAW

Important consequences resulted from this parochialism. It raised the question: who are the people of a parish? This assumed greater and greater importance as the social and economic movements of the seventeenth century compelled migration of labour. Another result of the decay of central control was the decay of the practice of setting the poor to work as parish employees on materials supplied by the overseers.

People in search of work or relief naturally moved to the wealthier parishes, especially those of London, where they received a frigid welcome from the thrifty overseers. Poor law enactments had implied that the parish responsible for the maintenance of a poor person is the parish of his birth or the one where he last resided for a substantial period, e.g three years Nevertheless, the legal position was vague and its definition was not made any easier by dislocations of the Civil War. Meanwhile, the parish, if a good enough unit of administration in earlier centuries and even in the time of Elizabeth, was no longer so. England was moving rapidly towards industrialism and to a more complex economy (Fig. 102).

The Parliament of the Restoration failed to appreciate this. In its anxiety to safeguard the wealthier parishes against an influx of paupers or potential

paupers, it hastened to pass the *Settlement Law* of 1662, an Act which aroused more controversy over the next hundred years than any other piece of poor law legislation. This Act authorized justices of the peace to remove from their parish within forty days any newcomer likely to require relief. Thus the State fixed a rigid framework of parochial control on a large section of the people at a time when trade was expanding and town life increasing, when movement of labour was to be encouraged rather than discouraged For the Settlement Law, which gave to overseers such extensive powers over human life, affected all whose annual rent was below £10 a year, and this included not only the infirm and aged but agricultural labourers, manual workers and even hosts of small "manufacturers." Whether because poor or because potentially poor, the great part of the lower working class thus came under the control of the overseers It is true that a system of certification, introduced in 1697, permitted a person bringing a certificate from the authorities of his old parish to reside in another parish until he actually became chargeable, but in practice certificates were grudgingly given, because the liability involved was greater and more uncertain than overseers were prepared to incur

A hundred years elapsed before Parliament enacted that a person could be removed only when actually chargeable. Adam Smith was loud in condemnation of a system which so restricted the movement of labour and the liberty of the common man "There is scarce a poor man in England of forty years of age," he wrote with pardonable exaggeration, "who has not in some part of his life felt himself most cruelly oppressed by this ill-contrived law of settlements " The operation of the Settlement Law led to many shady practices Anxious to relieve themselves of potential paupers, overseers often apprenticed children in another parish so that they secured a legal right to settle there permanently after forty days apprenticeship. To offload a pauper on another parish the overseers might even rent a house on his behalf, sell it when the forty days had expired, and leave the unfortunate to the tender mercies of new parish authorities. There is the case of a woman who was offered five pounds if she "would by stealth and privately creep into the parish of All Saints, Hertford, again, or into any other parish" (Lipson, ii. 464). When a person suspected of smallpox, the greatest scourge of the time, entered a parish he did not receive medical attention, but was driven from the village to carry infection wherever he went, until, finally overcome by disease, his compulsory wanderings ceased and the parish authorities were forced to accept liability.

THE WORKHOUSE TEST

In Tudor and in early Stuart times relief of the poor and prevention of unemployment had been supported on grounds of political expediency. The existence of a large body of paupers, and more especially of able-bodied unemployed, was a challenge to the security of the State. No government, least of all a paternal administration, could tolerate such a disturbing element in society The sick and aged and orphans had therefore to be provided for, and work must be found for the able-bodied. Behind such views still lingered

the medieval tradition which had defended relief on Christian grounds Relief was not confined to individual doles or provision of work. Prices of foodstuffs were controlled, and on occasion corn might be sold to the indigent below market price, all by order of the Privy Council. The effect of the Civil War, which curtailed the powers of the Privy Council, was to sweep away this paternal conception of the State. Henceforth there was less recognition of social obligations and more insistence on individual responsibility.

Before the close of the seventeenth century, as Dr. Dorothy Marshall tells us,* there were loud, and persistent, complaints that high rates were a burden on society. "We cannot make our English cloth so cheap as they do in other countries," said a writer in 1681,

"because of the strange idleness and stubbornness of our Poor, especially in all places within fifty miles of London, where the Poor are most numerous, where wool is cheaper than in most places and so it would be a very good place for trade. But these Poor are so surly that most of them will not work at all, unless they might earn as much in two days as will keep them a week And when they do work they will often mar what they do." (*The Trade of England Revived*, 1681, 8)

In the seventeenth century it was often urged that low wages were the cause of poverty. The eighteenth set a different fashion:

"It must be confessed in the now course of trade that the bringing down of our wool and other materials to a low rate, and reducing the wages of our manufacturers to a level, at least, to what the French and Dutch give upon like occasions, is absolutely necessary to support our foreign trade," said a writer in 1722. (L Braddon, *The Miseries of the Poor*, 1722, 18.)

Expressing the point of view of the vigorous manufacturing class, Defoe declared:

"The Farmers' Wives can get no Dairy Maids, their Husbands no Plowmen, and what's the matter? Truly the Wenches answer they won't go into service at 12d. or 18d. a week, while they can get 7s. to 8s a week at Spinning, the men answer they won't drudge at the Plow and Cart, hedging and ditching and threshing and stubbing, and perhaps get £6 a Year, and coarse Diet, when they can sit still and dry within Doors and get 9s. or 10s. a Week at Wool Combing, or at Carding and such Work about the Woollen Manufactory" (*The Behaviour of Servants*, 1724, 84.)

Acceptance of such views discouraged the policy of providing the poor with materials to be worked up in their own homes. More and more, employment of the poor was provided under supervision in a special building for the purpose. One of the first workhouses of this kind was established by Bristol shortly after the English Revolution Other towns followed suit until the principle of employing the poor, children or adult, in workhouses was generally adopted throughout the country. The Acts authorizing the erection of workhouses empowered authorities to compel "idle or poor people begging or seeking relief . . to inhabit or to work" in the public workhouse. In short, they established the workhouse test. As in Tudor days, State policy of the eighteenth century followed municipal precedents; and

* *The English Poor in the Eighteenth Century*, 1926.

in 1723 a statute authorized parishes or groups of parishes to erect workhouses and to make residence a condition of relief. This Act of 1723 stimulated the erection of workhouses and the method was soon acclaimed a great success It was more economical and resulted in lower rates The poor were better provided for than "when they lived on common begging or in a miserable ruinous cottage." Vagabonds and idle people disappeared overnight when a condition of relief was entry into the workhouse; and children were taught habits of industry and "put in a way of being a blessing instead of a burden to their country" (Fig 103)

Its greatest merit in the eyes of the people of the time, and the one which most encouraged adoption of the system, was the discovery that workhouses led to a great fall in rates. Hence the eighteenth-century workhouse became a panacea for all manner of social evils. At first there were different institutions to serve the different needs of the aged, the orphans and the unemployed. Institutional treatment for pauper children, where they could be taught trades and encouraged in habits of industry, was regarded with growing favour Even the charity schools adopted industrial curricular English public opinion, or at least what public opinion mattered at the time, regarded the training of children to earn a living, by however hard a path, as the major responsibility of society to the young.

By the end of the century, most of the institutions were of a common type, "the general mixed workhouse," where all sorts of inmate crowded together. The workhouse became a symbol of dread and despair; nor was it only the poor who had cause to dread it Everyone in the neighbourhood of a workhouse lived in instant fear of the devastating fevers bred by its filth Crabbe has painted a sombre picture of the appalling conditions almost universally prevalent (Fig 104)·

"Theirs is yon House that holds the Parish-Poor,
Whose walls of mud scarce bear the broken door,
There, where the putrid vapours, flagging, play,
And the dull wheel hums doleful through the day;
There Children dwell who know no Parents' care,
Parents, who know no Children's love, dwell there!
Heart-broken Matrons on their joyless bed,
Forsaken Wives and Mothers never wed;
Dejected Widows with unheeded tears,
And crippled Age with more than childhood fears;
The Lame, the Blind, and, far the happiest they!
The moping Idiot and the Madman gay
Here too the Sick their final doom receive,
Here brought, amid the scenes of grief, to grieve,
Where the loud groans from some sad chamber flow,
Mixt with the clamours of the crowd below,
Here sorrowing, they each kindred sorrow scan,
And the cold charities of man to man;
Whose laws indeed for ruin'd Age provide,
And strong compulsion plucks the scrap from pride,
But still that scrap is brought with many a sigh,
And pride embitters what it can't deny." (*The Village*)

OUTDOOR RELIEF AND FAMILY ENDOWMENT

In the second half of the century there were growing signs that the workhouse test was not achieving the results confidently claimed for it in early Georgian days. Workhouses were carriers of disease. They mixed good and bad. They separated families. They treated children abominably by bringing them into contact with the dissolute and the diseased. Under the impact of the humanitarian movement which exposed the evils of slavery in the plantations and the cruelties of the penal code, the conditions of life in the workhouse gained a wide publicity. Common decency was shocked at the treatment meeted out to those who, because of infirmity or lack of opportunity or tender years or old age, had no secure foothold in society. The names of Hanway, John Howard, William Wilberforce, are memorable in connexion with the crusade, but there were others who condemned workhouses for economic reasons. Their products competed with private enterprise, and so intensified the problem of unemployment. They were inefficiently managed and their cost, often heightened by corruption and sheer dishonesty, was a heavy burden on the rates. This was a very telling argument. Few could shut their eyes to a steady rise of rates and the appalling cost of the current practice for dealing with poverty.

To begin with, the erection of workhouses had been defended on grounds of economy. After an initial drop, costs had in fact mounted steadily. In short, the economies anticipated from the new method of relief had seldom been realized. This prompted the question: would it not be more economical to relieve the poor in their own homes and thus avoid the heavy capital expenditure and running costs of these institutions? By the last quarter of the century it was clear that a revolution in the prevailing attitude to the problem of poverty had taken place. Harshness and severity in dealings with the poor gave place to leniency, a change doubtless influenced by the state of England, as the enclosure movement and the process of industrialization became general. The workhouse test was quite out of touch with the realities of a period when employment of a larger and larger proportion of the people had come under the impact of economic forces beyond their control.

Greater leniency of administration, already showing practical results in some parishes, found fuller expression in a law passed in 1782. Gilbert, the author of the Act, was a pioneer of the new humanitarianism, benevolent, humane and genuinely anxious to lighten the lot of the poor. His proposal, accepted by Parliament, was to restrict the poorhouse to the aged and infirm and to maintain the able-bodied in their own homes, either by providing them with work, with cash payments to supplement inadequate wages, or by full maintenance from the rates. The Act, which was optional, legalized *outdoor relief*. The Justices of a tiny village in Berkshire gave the principle wide publicity by drawing up a convenient scale of relief easily adopted by other parishes. High prices and acute agrarian distress were the occasion of their meeting at the Pelican Inn of Speenhamland in 1795. Contrary to their original intention, which was to fix minimum wages for labourers as permitted, according to their interpretation, by the Elizabethan Statute of Apprentices at that time still on the Statute Book, they resolved,

"that it is not expedient for the Magistrates to grant assistance by regulating the Wages of Day Labourers, according to the directions of the Statutes of the 5th Elizabeth and 1st James. But the Magistrates very earnestly recommend to the Farmers and others throughout the county, to increase the pay of their Labourers in proportion to the present price of provisions, and agreeable thereto, the Magistrates now present, have unanimously resolved that they will, in their several divisions, make the following calculations and allowances for relief of all poor and industrious men and their families, who to the satisfaction of the Justices of their Parish, shall endeavour (as far as they can) for their own support and maintenance. That is to say When the Gallon Loaf of Second Flour, weighing 8 lb. 11 oz shall cost 1s. then every poor and industrious man shall have for his own support 3s. weekly, either produced by his own or his family's labour, or an allowance from the poor rates, and for the support of his wife and every other of his family, 1s. 6d When the Gallon Loaf shall cost 1s. 4d then every poor and industrious man shall have 4s. weekly for his own, and 1s 10d for the support of every other of his family And so in proportion, as the price of bread rise or falls (that is to say) 3d to the man, and 1d to every other of the family, on every 1d. which the loaf rise above 1s"

Because of its simplicity and its practicability the scale was soon adopted by many English parishes. Overnight the Berkshire Justices had become famous The *Speenhamland System*, legalized by Act of Parliament in 1796, remained in operation until 1834. During these fateful years, pregnant with economic and political change, it aroused more controversy than almost any other social problem It "combined a low but guaranteed minimum remuneration with some measure of family endowment." It was designed to meet a critical situation when prices were soaring owing to the French war, and when enclosure with all its social upheaval was reaching its height. Its widespread adoption during and after the war years was enforced by the deep social and economic changes resulting from the rapid growth of industrialism during a period of war and rising prices. Despite its drawbacks there is little doubt that this system of relief tided England over a critical period. Otherwise, as Canning himself conceded, social upheaval and maybe revolution would have been the lot of the country.

Naturally it came in for much criticism. A growing body of opinion protested that it connived at improvidence, encouraged early marriages and promoted large families. Malthus, equally strong in defence of privilege and opposition to social reform, declared that the population was being raised by bounties Modern research shows that he was misinformed. Between 1811 and 1831 the birth rate fell over all England, and though between 1801 and 1811 there had been a slight increase this appears to have had no connection with family allowances * That population was rapidly increasing was obvious enough What was not obvious was that the increase was due to a falling death rate Another argument used by opponents of the Speenhamland System was that it was costly. This was true Expenditure on poor relief rose from £4·3m in 1803 to £5 4m in 1815 and to £7·9m in 1818. In the early twenties it fell steadily, but by 1831 it was up again to £6 8m out of a total of £8 2m spent on all rates. Administration was lax and the

* J. S. Blackmore and F C. Mellonie, *Family Endowment and the Birth Rate in the early Nineteenth Century*, Econ Hist, May 1927, January 1928.

policy of giving subsidies from the rates depressed wages, because there was no incentive to employer or employed to pay or demand adequate wages so long as deficiencies would be made up by the parish authorities.

Though criticism was chiefly levelled against high rates, there was widespread alarm because the system made so many people dependent on public money. Contemporary opinion on the subject has a familiar ring. For the same arguments were used against the so-called "dole" in the twentieth century. In retrospect, it is difficult to see how country labourers could have lived through the early decades of the nineteenth century without some assistance. Though there was waste and inefficient administration, it was indeed absurd to suggest that the country could not afford the few millions spent on the relief of the poor. While expenditure on relief was rising, both population and national wealth were also increasing, and at a pace far exceeding anything ever experienced before.

THE SCOTS SYSTEM OF POOR RELIEF

The old Scots poor law was very much like the English, but there were fundamental differences. The basis of Scots poor law is in two Acts respectively passed in 1574 and 1579. The former made provision for a compulsory levy. The magistrates were to

"taxt and stent the haill inhabitantis within the parochyn according to the estimatioun of thair substance, w'out exception of persons to sic oulklie charge and contribution, as salbe thot sufficient to sustene the saide puyr people"

The other Act dealt mainly with the issues of settlement and removal, and closely resembles the English Law of 1662. Unlike the Elizabethan law, these measures made no provision for the able-bodied poor Indeed, it was expressly stated that no relief of any kind should be provided for them. Thus the Acts of 1574–9 dealt only with the aged and the impotent—those who "of necessitie mon live bee alms." At first, administration was in the hands of justices and commissioners, who seemingly showed no enthusiasm for their task. Before the Union of the Crowns, fresh legislation had constituted kirk sessions as the administrative authority. These bodies consisted of the parish minister and an unfixed number of elders chosen from the congregation. They were feared and respected throughout the length and breadth of every parish.

Though the Act of 1574 had provided for a compulsory levy, it was seldom employed until the industrial revolution created problems beyond the capacity of voluntary organization. The sessions depended for funds on church collections and voluntary bequests Only when these proved entirely inadequate did the heritor (Scots landowner) reluctantly contribute. After 1672 a system of registration was introduced and sessions were authorized to give badges to the poor, permitting them to beg The same Act stipulated that burghs should establish *correction houses* where beggars and vagabonds could be set to work under strict discipline The master was empowered to use every device "by whipping or otherwise (except torture)" to attain this end. Such a system of poor relief may have worked well enough when Scotland was

predominantly a rural country. The ministers and their elders, familiar with everyone in their parishes, could be depended on to manage the system with strictness, if not with humanity. On occasions heritors were called on to make up deficiencies, but rural parishes continued to depend largely on voluntary collections until the nineteenth century (Fig 105).

In urban areas conditions were very different There the number of the poor was swelled by casual labour and the genuinely unemployed. Moreover, maintenance was a more difficult problem in the towns. The growth of population and the spread of industrialism created new problems beyond the capacity of kirk sessions. In times of difficulty appeals were made to heritors to share in the responsibility of supporting the poor. Sometimes aid was given by special contributions, at other times by assessment. However given, admission of responsibility by the heritors strengthened the general tendency to substitute regular assessment for voluntary contributions. Over this issue a violent controversy raged in the first half of the nineteenth century. With an impassioned plea for "the simple parochial economy that was bequeathed to us from our ancestors," Dr. Chalmers, minister of St. John's Parish, Glasgow, demonstrated to his own satisfaction, and to that of all who on both sides of the Border wished to keep rates down, that the voluntary system was good enough. On the opposite side of the controversy the reformers, represented by Alison, could point to the experience of the Gorbals parish in Glasgow. Between 1811 and 1821 its population rose from 5,000 to 22,000. Despite this, Chalmers himself concedes that "this parish has never admitted an assessment—and the whole of its sessional expenditure for the poor is defrayed from a revenue of about £400 annually." "Happy Gorbals!" is Clapham's comment. Economic circumstances decided against the Church in favour of Alison. The deep depression that settled on industry in the late thirties and early forties caused untold suffering and made plain that a system of relief suitable perhaps for a rural parish could no longer suffice for industrial Clydeside.

Early in 1843, a Commission set up to go into the matter revealed the depths of suffering experienced by the able-bodied unemployed who had to resort to begging when every other source was exhausted. Its report was conservative. It recommended more poor houses, but was not enthusiastic about assessment and in fact did not recommend making it compulsory. For times of stress it urged more voluntary contributions. The outcome was an Act of 1845. This centralized administration of poor relief by creating in Edinburgh a *Board of Supervision for the Relief of the Poor*, superseded in 1894 by the *Scottish Local Government Board*, and in 1919 by the *Department of Health.* Local Parochial Boards (superseded by Parish councils in 1894 and by committees of the county and burgh councils in 1930), with representatives of the electors, were set up in parishes which adopted compulsory assessment. In parishes which retained voluntary collections, heritors and kirk sessions constituted the Board. Little by little, the latter dwindled numerically as compulsory assessment was more widely adopted; but as late as 1930 two parishes struggled on in Scotland without a compulsory rate. More poor houses were established under the Act which authorized, but did not compel, parishes or unions of parishes with a population of over

5,000 to combine to make this provision; but for long the accommodation provided was very meagre. In 1870 there were only 63 poor houses in Scotland Most of them were "incredibly small" With a population of 24,000 in 1871, the county of Sutherland had provision for 50 people in its combination poor house At the other end of Scotland, the Kirkcudbright poor house could take 250 out of a population of 36,000.

Hardly had the Act of 1845 gone on the Statute Book when distress and unemployment subjected its provisions to a heavy strain. Such outdoor relief as had been the custom in Scotland for many centuries went on as before. It had been designed for the sick and aged—the impotent poor—but it could not be denied to able-bodied unemployed, for whom Scots poor law authorities had scant sympathy In 1848 the Scottish *Board of Supervision* had allowed that they might be treated as "occasional" poor and given relief. Four years later this direction was challenged. On a test case the courts decided that the able-bodied had no right to parochial relief "in any circumstances." Such a decision, not finally reversed till 1921, when Scotland, like England, was in the depths of economic depression, could not be enforced to the letter Efforts were made to establish indoor relief, but Scottish reluctance to remain "indoors" kept the figure down "They just come in at the tae door and they gang out at the tither," said the Governor of the Dalkeith Poorhouse; but those who stayed out found it difficult to get relief. Clapham tells us that the number (with dependants) relieved outside was pretty much the same in 1912 as in 1888, despite a 15 per cent population increase between the two dates.

POOR LAW REFORM

We left our narrative of English social security legislation with the practice of outdoor relief, popularized by the Speenhamland Justices. After the Napoleonic War a different temper prevailed among the ruling class They now believed more and more in forcing people to find work and maintain themselves. To carry such a policy into effect consistently would, to be sure, have serious social and political consequences For even the most unenlightened could not maintain that unemployment and want were entirely due to lack of individual initiative So Parliament shrank from taking action till the Reformed House of Commons met Even then, it was deemed best to appoint a Royal Commission to inquire into the operation of the existing system. Its members were deeply influenced by Jeremy Bentham's Utilitarian philosophy, as interpreted by Edwin Chadwick. Its report, amounting to no less than fifteen folio volumes and consisting of upwards of 8,000 pages, embodies two general principles. One was that the payment of outdoor relief discouraged independence and diverted moneys from the original purposes of the Elizabethan law, namely the setting of the poor to work The other was the creation of strong central control to check extravagance and inefficiency of parochial administration.

The Whig government lost no time in giving legislative effect to the Royal Commission's proposals. In 1834, the year of the publication of the Report, it passed a *Poor Law Amendment Act*, destined to arouse bitter con-

troversy throughout the length and breadth of the manufacturing districts of England It provided for a short transitional period, after which outdoor relief was to be abolished and relief to be granted only in the workhouse. Far-reaching administrative changes were involved. Parishes were grouped into unions, and elected *Boards of Guardians* took the place of vestries and justices of the peace Over all there was a *Poor Law Commission* consisting of three members, with extensive powers of supervision and control. This Commission, appointed in the first instance for five years, had as secretary Edwin Chadwick and as leading member George Nicholls, who had gained his experience of poor law administration in a little parish in Nottinghamshire, where he had ruthlessly applied the workhouse test, to the immediate benefit of the ratepayers. The powers of the Commissioners were sweeping. So rigorously did they apply them that they earned the nickname of "the three bashaws of Somerset House."

By a shower of circulars, by orders, special and general, and by directions, Chadwick hammered the new plan into shape His task was not so easy as at first imagined. It took longer than anticipated to get the "Bastilles," as the new workhouses were called, into running order; and the Outdoor Relief Prohibitory Order, issued in 1835, had to be withdrawn Meanwhile, a strong current of public opinion was, and remained, hostile to the intention of the Act In the midst of want so widespread, thousands of ordinary decent men and women had come to regard outdoor assistance from the poor rates as a normal amenity of existence Its abolition could only result in making the workhouse the only home of countless people in the manufacturing districts of the north.

The Commissioners executed their task with ruthless determination in the rural areas. Cowed and prostrate after the savage repression of the agrarian disturbances of 1830, the labourer could offer little resistance to the new policy. Outdoor relief was swept away, and the labourer who had subsisted on a subsidized wage was now depnedent on his own earnings. The resultant suffering and want are incalculable. Happily for the countryside, the distress of a period of drastic readjustment was in part mitigated by demands of new employment and especially by the growth of railway building which created a large demand for unskilled labour. In the industrial areas of the north the situation was quite different There the Speenhamland System had never been fully operative, though it had served well enough to tide over periods of unemployment, under-employment and casual employment Some classes, such as hand-loom weavers and stockingers, highly skilled at their craft and respected members of the community, were more dependent on it than others. For almost a generation their wages had been falling below subsistence level; and they had eventually come to depend on the rates by the time the new Act came into force Many of them had then grown grey-haired at their looms, with no future in an age of power production.

Hitherto poor law administration had been local and personal It had been "neighbourly." Outdoor relief did not sunder familiar associations or carry with it the stigma of the workhouse test. Inevitably, therefore, the attempt to enforce the new Act aroused bitter opposition, either with the aim of

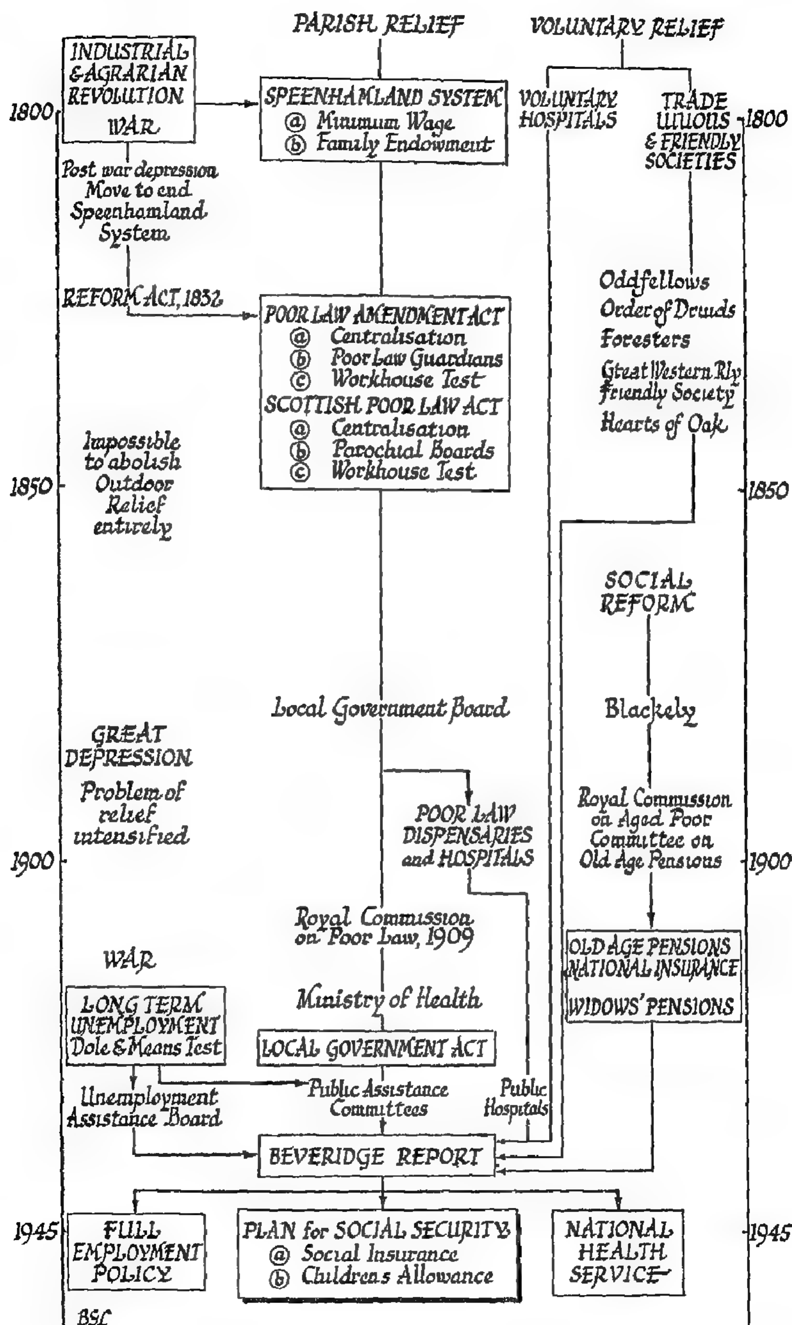
frustrating the efforts of the Commissioners to enforce it, or with a view to repeal of the law itself. The demand for repeal was later absorbed in the wider claims of the Chartist Movement. Many of the leaders, like the Methodist preacher Stephen and the "factory king" Richard Oastler, drew inspiration from the Bible and attacked the Act of 1834 as a violation of Christian principles and to be justly opposed by all human means. This is how Stephen put his case at Newcastle in January 1838.

"The people are not going to stand this, and I would say, that sooner than wife and husband, and father and son, should be sundered and dungeoned, and fed on 'skillee'—sooner than wife or daughter should wear the prison dress—sooner than that—Newcastle ought to be and should be—one blaze of fire with only one way to put it out, and that with the blood of all who supported this abominable measure."

For a time the situation was menacing It was, as Hovell put it, a "mass demonstration of misery," full of inflammable material. With the disruption of the Chartist Movement and the improvement of trade in the early forties, dissent died down, but it had left its mark. Men of letters, such as Dickens and even Carlyle, threw in the weight of their persuasive gifts to aid the initial clamour. *Oliver Twist* appeared as a satire on the new Board of Guardians and their workhouses in 1838 Carlyle, staunch conservative, denounced the philosophy of the Poor Law Amendment Act with characteristic vehemence:

"The New Poor Law," he says, "is an announcement, sufficiently distinct, that whosoever will not work ought not to live Can the poor man that is willing to work, always find work, and live by his work? Statistic Inquiry, as we saw, has no answer to give. Legislation presupposes the answer—to be in the affirmative. A large postulate; which should have been made a proposition of; which should have been demonstrated, made indubitable to all persons! . . . There is not a horse willing to work but can get food and shelter in requital; a thing this two-footed worker has to seek for, to solicit occasionally in vain. He is nobody's two-footed worker; he is not even anybody's slave. And yet he is a two-footed worker, it is currently reported there is an immortal soul in him, sent down out of Heaven into the Earth, and one beholds him seeking for this!—Nay what will a wise Legislature say, if it turn out that he cannot find it; that the answer to their postulate proposition is not affirmative but negative?"

Indeed, the Commissioners found it impossible to enforce their policy in its entirety. Outdoor Relief Prohibitory Orders were unworkable, and exceptions became the rule. The extent of their failure is evident from the following remarks of Clapham: "In the quarter ending Lady Day 1844, 231,000 people were relieved in the workhouses of England and Wales, and 1,247,000 people outside them. For the corresponding quarter of 1848, the figures were 306,000 and 1,877,000." None the less, the Commissioners, whose appointment had been renewed periodically but who now demitted office in favour of the newly-established *Poor Law Board*, could in 1847 congratulate themselves on having effected considerable reduction both with respect to the number of paupers and to the cost of relief In that year



TIME CHART 22 · FROM PARISH RELIEF TO SOCIAL SECURITY

the percentage of paupers in England was 6·2 as against 10 in 1831. The poor rate per head was 6s. 3d. as against 10s in 1831. These monetary economies had been achieved at the cost of much human suffering. "Rightly or wrongly," says a contemporary historian of the factory movement, "... the labourers of England believed that the new poor law was a law to punish Poverty."

By the middle of the century it was clear that the Poor Law of 1834 could not be fully implemented The Commissioners had mapped out the country into unions of parishes; and in most places Guardians were striving to shape the new system in accordance with the ideas of Somerset House; but their achievements fell far short of what the architects of the Act had hoped. Even the accommodation provided was different from their intentions. The Report of 1834 had visualized different houses for different classes of paupers Instead, Guardians and Commissioners alike had adopted the general mixed workhouse, with half-hearted attempts to segregate children and sick. Almost thirty years later, in evidence before the Poor Relief Committee of 1861, Nassau Senior, one of the Commissioners, declared indignantly: "We recommended that in every Union there should be a building for the children, and one for the able-bodied males and another for the able-bodied females, and another for the old, we supposed the use of four buildings in every Union." In the application of the general principle, "all or nothing," they had to admit failure in face of the sullen determination of the workers in the industrial areas. In 1852 the Poor Law Board admitted this frankly. It was "not expedient," they declared, "absolutely to prohibit outdoor relief even to the able-bodied." "What had been thought of as a national policy in the thirties," says Clapham,

> "had become, by the seventies, a policy applied only to men in overcrowded rural Unions—and even there with exceptions No doubt it had helped the good work of turning agricultural labourers into navvies, urban carters, railwaymen, policemen and emigrants. A later generation has learnt the risks of relief systems which give insufficient encouragement to mobility and occupational adjustment But it was hard that these risks should have been averted for forty years at the sole cost of the bread-and-cheese fed labourers, with their 9s to 11s. a week" (Figs. 106 and 107).

As the century moved to its close amidst depression and bad trade, there was a steady move away from the ideas and practices of the thirties. Humanitarian sentiment was again in the ascendant, and the political consciousness of the working class, recently enfranchized and so able to bring pressure to bear on Parliament, now created a new attitude to poor relief, despite the efforts of a few individualists who clung to the remedies of an earlier generation. Of these was Henry Fawcett, who in 1871 expressed the hope, "by gradual steps to discourage and ultimately to abolish outdoor relief." The Local Government Board and its Inspectors and the official Poor Law administrators agreed with this view. While force of circumstances had made them modify their practice, they still clung to the ideas that had inspired Edwin Chadwick. Indeed, at the close of the century social statistics seemed to vindicate the success of a policy whose aim was to make the workhouse "deterrent,"

and to limit outdoor relief to the able-bodied. The percentage of pauperism had fallen from 4·6 in 1868–71 to 2·8 in 1884–6 and in the nineties it fell several times to 2·5. Just before the first world war it was 2·15 for England and Wales, and 2·3 for Scotland.

The mean figure of outdoor relief to the able-bodied fell from 129,000 in 1867 to an annual average of less than 68,000 in the nineties. This reduction was due to several circumstances whose relative magnitude is difficult to assess; to greater administrative economy on the part of the authorities, to private charity and to a rising standard of living. Not least must have been the provident activities of trade unions and friendly societies. Nevertheless, as Clapham puts it, "there was crushed misery in the social depths and grinding strain in strata above them." Meantime there was also more generous treatment of the aged and the sick at public expense. Tea and sugar, tobacco and snuff were allowed in the workhouses and trained nurses replaced fellow inmates. A Circular of 1900 recommended adequate outdoor relief for old people of good character, a practice long established in some Unions but generally frowned on by the authorities. The sick, too, had been treated with more kindness, and specialized institutions were being erected for them in some parts of the country. London had its Poor Law Dispensaries before the eighties. By 1900 the number of hospitals, either part of the main workhouse building or separate from it, was increasing in the provinces. Some were regarded as "in no way inferior to the best general hospitals," but these existed only in the more prosperous areas. By 1914 only 10 per cent of the Poor Law Unions had "separate infirmaries." The children, too, and at long last, were benefiting from the reforming zeal of the poor law authorities. For long they had been kept in general mixed workhouses. As late as 1906 they could be found in charge of aged women inmates or even of certified imbeciles. The babies in one House were "under the charge of the laundress, who also looked after the female tramps." Even in the best Houses in London and other large towns, and that as late as 1909, "the infants in the nursery seldom or never get into the open air." Compulsory removal of children from the workhouse did not come about till March 1915.

SOCIAL INSURANCE

From the early days of the Industrial Revolution workers in some industries had made provision for their unfortunate members by collections among themselves. Friendly societies and trade unions, says Dr. Baernreither,*

> "are only different sides of the same historical process . . . both owe their existence to the same powerful reaction of the working classes against the deterioration of their material condition, both are among the most conspicuous examples of English self-help, they mutually supplement each other, . . they are twin-children of the same spirit."

Before the close of the eighteenth century several small friendly societies had been formed with very limited objects, some being no more than burial or fellowship clubs. Their progress was arrested by the Napoleonic War,

* *English Associations of Working Men*, 1889, 157–8

when the authorities frowned on meetings of working people as fertile soil for the seed of revolution; but there were signs of revival by the middle of the century, in the same ideological context as the growth of the temperance movement. Lancashire, especially, was the home of the movement, but wherever industrialism had brought low wages, truck, intemperance, or casual labour, friendly societies attracted a working class membership. The Independent Order of Oddfellows, started in Manchester, had 46,000 members in 1838 and 617,000 in 1886. The Ancient Order of Foresters with headquarters in Leeds had 65,000 in 1845 and 667,000 in 1886. There were many others.

The creation of these societies encouraged, and was encouraged by, the contemporary glorification of self-help They provided opportunities for social intercourse and they gave their members experience in the arts of democratic government; but they could not provide a solution of the problems of poverty and insecurity, because "the class which needs social insurance cannot afford it, and the class that can afford it does not need it." Meanwhile trade unions had also developed provident activities, particularly in the third quarter of the nineteenth century In the eighties there was a reaction against this policy. The young leaders of the new unions asserted that the State, rather than individual societies, should be responsible for social insurance, and public companies, quick to see the prospect of profits to be extracted from the needs of working people, now entered the field First and foremost was the Prudential Assurance Company, founded in 1854 It quickly extended its business by house to house collections of small weekly premiums. By 1900 it had 14m policies with an average premium of two pence a week and funds totalling £17,000,000 Other companies and collecting societies followed in its wake. During the present century the growth of their activities has been prodigious, as indicated in the Beveridge Report.

"In 1910 the total premium income of all industrial assurance offices was barely a quarter of what it was in 1939. Today the business is immense. In 1939 there were 103,000,000 policies of industrial assurance in force, more than two and a quarter policies for every man, woman and child in Britain. The sums assured amounted to £1,668,000,000, and the Assurance funds to £455,000,000. The amount paid in claims on death was £24,000,000 and the amount paid in claims on maturity was nearly £11,500,000. The premiums received were over £74,000,000 and the expenses of management were nearly £24,000,000, exclusive of dividends to shareholders amounting to over £1,750,000 after payment of £1,600,000 as income tax. In addition to premiums, the companies and societies received in 1939 nearly £20,000,000 as interest on investments."

In the heyday of *laissez-faire*, some people believed, or hoped, that friendly societies in one form or another could suffice to provide for sickness, old age and unemployment in the absence of any State action. It was assumed that poverty and want would disappear as men and women showed more care and more foresight in the custody of their domestic finances. The publication of Charles Booth's great *London Survey* was a setback to such complacency. Thenceforth the demand for active participation of the State in workers' insurance gained an increasing volume of support. Canon Blackley had already

devised a scheme when England was in the depths of depression in the seventies It was to be financed mainly by workers' contributions and managed by the State It was to provide all wage-earners in sickness with 8s per week and on attaining the age of seventy with 4s. a week. While this scheme was the subject of much discussion and gloomy forebodings, Bismarck introduced a comprehensive scheme of social insurance in Germany, covering accidents, sickness and old age, based on contributions by employer, work-people and the State.

In 1892 Joseph Chamberlain put forward a new scheme for old age pensions, and the Government responded by appointing a *Royal Commission on the Aged Poor*. Reporting in 1895, it revealed many evils, but proposed no remedies. The year after that the matter was referred to a Committee on Old Age Pensions. After two years' study of over a hundred schemes, it ended by rejecting all and suggesting none More committees followed and all sorts of schemes were advanced, contributory, non-contributory, voluntary, assisted, compulsory, schemes for wage-earners only, schemes for everyone. The Boer War delayed action; and it was not until 1908 that an *Old Age Pensions Act* conceded 5s per week at the age of seventy to all those with means below £21 per annum. It was, says Clapham, "the first solid instalment of that social reform to which Liberals, and the small associated parliamentary power of Labour, were committed It was also, though perhaps not with design, a step towards that break-up of the Poor Law, which became a fighting catchword after the Reports of the Royal Commission had been issued in the following year" (iii, 419)

Indeed, the *Old Age Pensions Act* was the first serious breach in the old Poor Law citadel. Three years later there was a more momentous step towards a national scheme of social insurance. Despite almost unanimous opposition of Conservatives and doctors inside and outside Parliament, the *National Insurance Act*, sponsored and piloted through its stormy passage by Lloyd George, took its place on the Statute Book It combined two schemes, very different in form and scope. Part I of the Act, which came into operation on July 15, 1912, was concerned with *health* It provided for the payment of sickness, disablement and maternity cash benefits, for a practitioner service and certain medical benefits for the insured. The scheme, based on the contributory principle and making use in its administration of the existing friendly societies and trade unions, was compulsory for all wage-earners (and salaried people) with incomes below £160 a year. In 1919 the income limit was raised to £250 a year and in 1942 to £420 It is significant that the British Medical Association, the doctors' trade union, opposed the scheme, as they now oppose proposals for a national medical service. Part II of the 1911 Act introduced a limited scheme of *unemployment* insurance It applied only to a group of industries where the risks of unemployment were highest, viz. Building, Construction of Works, Shipbuilding, Mechanical Engineering, Iron Founding, Construction of Vehicles and Saw-Milling Coming into operation in July 1912, it brought within its scope about 2¼m workers. In 1920 the scheme was extended to cover over 11m workers, and non-manual workers whose income was below £250 a year were included In 1940 the income limit was raised to £420 a year.

Somewhat earlier than the birth of the national scheme of social insurance, labour or employment exchanges had come into being. The proposal that there should be a sort of clearing house where employers with jobs to offer and workers needing employment could meet, was not new. It had been experimented with at home and abroad, and had been discussed since the days of Robert Owen. In 1902 and in 1905, under the *Unemployed Workmen Act*, the State took steps to encourage re-employment, but with little success because of the apathy of local authorities and the Local Government Board Meantime, Sir William Beveridge, pioneer of the British Scheme of unemployment insurance and author of the most discussed report of modern times, was investigating the problem of unemployment His book, *Unemployment a Problem of Industry*, emphasized that most of the unemployed were in fact the casually unemployed. His solution, proposed and carried into effect in 1909, was widespread creation of Labour Exchanges. Beveridge himself was appointed to organize them.

THE NEED FOR A COMPREHENSIVE SCHEME OF SOCIAL INSURANCE

Schemes initiated before 1914 were all designed to meet "normal" or short-term unemployment. They were never meant to cope with the mass unemployment of the inter-war period The Beveridge Scheme itself, the author is careful to point out, cannot stand if unemployment is permitted to reach the fantastic levels of pre-war days Its success will depend on a parallel move to establish Full Employment in peace as in war.

A post-war boom collapsed towards the end of 1920. Britain was then faced with an unprecedented unemployment problem. The national scheme of unemployment insurance, which made individual payments depend on the number of contributions paid, was faced with bankruptcy. It had been framed to protect workers against short spells of unemployment. Since 1920 most changes introduced have had to provide against long-term unemployment. In December 1920 the number out of work stood at 858,000, a month later it was 1,213,000, and in March 1921 it was well over 1,500,000 By this time, and as a consequence of the 1920 Act, the scheme now covered the greater part of the wage-earning population Rates of benefit at 15s. a week for men, 12s. for women and half rates for juveniles, were payable only for 15 weeks in any one year. Even so, six weeks' contributions only guaranteed benefit for one week. Because of widespread distress, dependants' benefit was grafted on the original scheme in November 1921, and a distinction between two kinds of benefit was made, *covenanted benefit*, to which an insured worker was entitled by virtue of contributions already paid, and *uncovenanted benefit*, payable for a further period at the discretion of the Ministry of Labour. This distinction gave rise to endless trouble, the latter payment being popularly referred to as the *dole*, a term extended later without discrimination to any payment received by the unemployed.

For all this, increasing numbers of people were forced to rely on the poor rates, if only because there was a gap between the expiry of uncovenanted benefit and its renewal. Over this gap a battle royal waged until its abolition by the Labour Government of 1924 Meantime, the problem of long-term

unemployment remained unsolved, and when economic depression reached its zenith in 1931 the situation was critical. Early in 1929 the unemployment figure was in the neighbourhood of 1,250,000. A year later it was about 1,750,000 and in September 1931 it was 2,900,000. There were frantic cries that the "dole" was bringing Britain to bankruptcy; and the *May Committee* issued an alarmist report calling for drastic economies, including cuts of unemployment benefit In 1931, when expenditure on poor relief was about £1 per head of the population, Parliament introduced Transitional Payments, a scheme by which the Treasury assumed responsibility for the needs of long-term unemployment Subject to a means test, applicants were to receive relief through local *Public Assistance Committees*, the poor law authorities under a new name, set up under the Local Government Act of 1929.

Following the recommendations of a Royal Commission on Unemployment Insurance, a new *Unemployment Act* was passed in 1934. It did two things. It improved and tightened up the scheme of national unemployment insurance; and it transferred responsibility for dealing with transitional payments from Public Assistance Committees to an *Unemployed Assistance Board*. Thus the able-bodied poor were removed from the province of the poor law authorities. At the beginning of the war, the U.A.B , as this board was called, became the Assistance Board with wide powers to relieve distress whether of unemployed workers or of professional and business people whose livelihood had been undermined by the war. The Public Assistance Committees continued to handle local destitution. While the problem of unemployment had been one of the chief preoccupations of governments between the two wars, considerable advances had also been made in dealing with other aspects of social security. In 1925 there was a *Widows, Orphans and Old Age Contributory Pensions Act*, which provided the first national scheme of contributory pensions, as distinguished from the non-contributory old age pensions payable under the Act of 1909 As a consequence of these and other Acts the numbers covered by National Insurance schemes has steadily increased.

NUMBERS INSURED IN GREAT BRITAIN, 1914–1938

(*figures in* 000's)

At December 31*st* (*a*)	*Unemployment*	*Health* (*b*)	*Widows, Orphans and Old Age*
1914	2,500	13,689	—
1921	11,081	15,165	—
1926	11,774	16,375	17,089
1931	12,500	17,353	18,513
1936	14,580	18,081	19,651
1938	15,395	19,706	20,678

(*a*) In July for each year for Unemployment (Beveridge Report, 213)
(*b*) Excluding persons over 65 years of age

Despite the very great increase in the scope of National Insurance the numbers in receipt of poor relief have remained considerable

NUMBER OF PERSONS (INCLUDING DEPENDANTS) RELIEVED IN GREAT BRITAIN

	Domiciliary 000's	*Per 10,000 Population*	*Institutional 000's*	*Per 10,000 Population*
1900	584	158	227	61
1910	628	155	304	75
1920	369	88	195	46
1925	1,064	243	229	52
1930	1,018	228	233	52
1939	1,156	249	169	36
1942	462	98	143	30

(Beveridge Report, 218.)

The extension of National Insurance has led to a reduction in numbers claiming relief under the poor law. In particular, the Old Age Pensions Acts, including the Supplementary Pensions paid by the Exchequer through the Assistance Board, have removed the main cause of out-door relief. Widows' pensions have contributed to the same end, but while the numerical level of poor law assistance is lower than it would have been had no National Insurance Schemes been in operation, the amount paid out is higher, because Public Assistance Committees in recent years have shown more generosity with respect to scales of relief. The main reason why the poor law still operates is that existing schemes of National Insurance do not yet provide an adequate minimum for basic human needs. For instance, in 1942, 59 9 per cent of the total out-relief in England and Wales went to the sick, who were inadequately provided for under the National Health Insurance Acts The sick insured worker received in benefit only 18s. per week with no allowance for wife and family. After every other means had been exhausted, the insured had therefore no alternative but to go to the Public Assistance Committee; and widows left with inadequate pensions had to seek additional assistance from the same source.

THE BEVERIDGE REPORT

Though much has been achieved by National Insurance Schemes during the last generation, it is clear that the time had now come to establish a comprehensive scheme to provide for every contingency and to authorize adequate scales. It is clearly absurd that a manual worker should receive free medical attention and a small allowance when ill, while his wife and children are excluded from benefits. It is irritating and wasteful that so many different agencies are involved in administration—Ministry of Health, Ministry of Labour, Assistance Board, Public Assistance Committees, etc. In June, 1941, the Government set up an Inter-Departmental Committee on Social Insurance to survey the whole field and make recommendations. The chairman was Sir William Beveridge, who before the war of 1914–18 had made notable contributions to the problems of unemployment and insurance. The Report presented in 1942 is associated with his name. It does not cover the whole field of post-war social reconstruction, though Beveridge points out the close connexion between its special problem and other issues, such

as Unemployment, Housing, Health and Education It lays down the principle that want arises from two main causes. (*a*) interruption of earning power, through unemployment, illness or old age, and (*b*) large families. A satisfactory plan for Social Security must therefore provide for (*a*) State Insurance to cover unemployment, ill-health, old age, widowhood; (*b*) adjustment of income to family needs by family allowances The Beveridge Report proposed that the latter should be a charge on the Exchequer, and that allowances should be paid with respect to all children after the first one, whether the parent is working or not. The solvency of the plan depends on two assumptions: (*a*) the creation of comprehensive health and rehabilitation services; (*b*) maintenance of full employment.

Two years later the National Government declared its policy on this momentous subject in four *White Papers*. The first dealt with Social Insurance and is substantially the Beveridge plan, while the second covered Workmen's Compensation which Beveridge included in his general scheme At the same time the principle of Children's Allowances was accepted and steps were taken to legislate for this. The remaining White Papers outlined Employment Policy and a National Health Service The latter aroused much opposition from the medical profession and was withdrawn The end of the war and the General Election of 1945 placed on the new Labour Government responsibility for establishing a comprehensive scheme of social security, embracing a unified national health service and pursuit of a policy of Full Employment Before the summer of 1946 the first of these schemes, in the shape of the National Insurance Act, was carried to the statute book. Meantime a plan for a unified national health service has been embodied in the Health Bill now before Parliament

CHAPTER XXI

EDUCATION

IN the more spacious mobile life of our own age, government has become more and more concerned with the guarantee of four freedoms. We have already dealt with two of them, freedom from disease (Chapter V), and freedom from want (Chapter XX). We now come to the third, freedom from ignorance. A society which can guarantee an adequate standard of living and of health is a society which makes the fullest use of scientific discovery, hence one which has to train a large proportion of its members to highly specialized tasks. The extent to which the activities of the specialist bear fruit in a high level of social security also depends on the extent to which society accepts the responsibility of educating all its members to a realization of the nature of the needs human beings share and the resources available for satisfying them Such are the main tasks of education in a free society, dimly apprehended by many of the pioneers of democracy, such as Rousseau, Owen and Cobden, though as yet few people realize the magnitude of the undertaking

Still less did those who laid the foundations of a public educational system during the nineteenth century. In the medieval set-up the chief instruments of social security were the family, the Church and the guilds. The same is true of education. Outside the crafts still chiefly carried on within the home, specialist education was largely the concern of the Church. Knowledge of craftsmanship, like knowledge of husbandry, was transmitted by word of mouth from father to son or master to apprentice As yet there were few essentially *literate* vocations, those of the priest, the lawyer, the physician, the skilled navigator and the financier being such. The printing press and the Reformation made the knowledge of the written word the birthright of the middle classes, but a large proportion of the adult population of Britain was still unable to read or write or perform elementary calculations at the beginning of the nineteenth century Urbanization and vocational specialization, concomitant on the expansion of factory production, introduced a new tempo of existence inconsistent with the slow diffusion of information by oral transmission. The education of large numbers to the mastery of new techniques, to new obligations, to new responsibilities and to the arithmetic of balancing wages and prices in an economy of uncontrolled price levels, called for secular instruction of much wider scope, and a much higher general level of literacy than had existed in the past Thus the nineteenth century witnessed a struggle for the secularization of the higher learning and the final elimination of illiteracy

THE CHURCH AND EDUCATION

As the printed book, the newspaper, the cinema and the radio transmit the common knowledge of our own century, the medieval Church expounded the moral order of its own time through the medium of the sermon, the pageant and the mystery play. Beyond that, its interest in education arose primarily through

the need to train priests and administrators of the Holy Roman Empire. Its common medium was the Latin of St Jerome's Bible. Latin scholarship was indeed the basic discipline alike of theology and of Roman law Besides theology and law, and such secular philosophy as provided a rationale for one or the other, the Church had other interests to foster By becoming the imperial Church in the fourth century, it had inherited the oldest social function of the priesthoods in the Mediterranean civilizations of the ancient world. The priest was the custodian of the calendar, which was the indispensable background of the priestly ritual Thus Church scholarship, though hostile to experimental science, was at all times officially disposed to encourage the study of practical astronomy. Eventually, it had to come to terms with secular science in a different domain In accordance with the beatitude for those who minister to the poor, the medieval Church was responsible for the foundation of hospitals, and in that capacity receptive to the medical lore of the Moslem World Indeed, teachers of physick, in universities which sprang up in the larger towns of Western Europe during the twelfth and thirteenth centuries, were often Jewish missionaries of the more enlightened culture which flourished in Moorish Spain Universities grew in response to the needs of students who came from a distance to attend the lectures of some outstanding teacher.

Such students formed their guilds and appointed their own rectors. At first there were no halls of residence or colleges. Students lodged near the teachers who attracted them They were not youths but mature men, often beneficed clergymen, anxious to equip themselves for official positions in church or state They studied Latin, rhetoric, law and theology. In course of time degrees, instead of being simply titles of honour as originally, came to be accepted as a hallmark of those qualified to teach others. In this way the universities of Bologna, Paris and Oxford arose in the twelfth century, Cambridge in the early years of the thirteenth. The universities were fed by grammar schools which provided elementary training in Latin, but neither the grammar nor the collegiate nor hospital schools catered for the masses. They served the severely practical object of providing a preliminary training for men who sought positions in church and state. The church, in effect, was a teaching body, but a teaching body of narrow scope It stood not for expanding knowledge but for traditional knowledge, for order not for discovery. Knowledge so conceived was a set of established propositions. The work of the reason was to harmonize them and to bring them into subordination to the authoritative doctrines of the church. Content to accept the written word, the medieval student in general ignored nature, and the medieval universities of Western Europe made little or no contribution to what we now call science Such teachers as fostered an enquiring outlook had themselves come under the spell of Moslems who had garnered the fruits of Greek science and Hindu mathematics, and had contributed notably to the study of medicine, astronomy and geography. While the Moorish universities of Toledo and Seville advanced the basic sciences of navigation, and so prepared the way for the great voyages of exploration, the Roman Church, out of touch with the virile culture of the Moslem world, remained aloof from, or hostile to, the naturalistic movement of the time.

At first the schools and the universities of the Roman Church provided a literate education only for the small section of the community with aspirations to office in church and state. The masses got information or misinformation about the world about them from experience, by word of mouth and from the teaching of the parish clergy. Norman barons brought up their sons to be men of action, trained in sport, in archery and in military exploits, and instructed by travel. Apart from such teaching as he got from his mother, or may be from a private tutor, the education of the young baron was essentially practical. In the twelfth and thirteenth centuries the Jews alone constituted a literate community outside the monasteries and university cities of North-Western Europe.

THE RISE OF CAPITALISM AND EDUCATION

In the fourteenth, fifteenth and sixteenth centuries powerful forces were reshaping western European life on new lines. In particular, the rise of capitalism challenged old ways of living and accepted modes of thought. Conditions so created demanded new ventures in education and new kinds of skill. The clerk in the counting-house needed proficiency in accounting rather than proficiency in Latin texts. Mariners required knowledge of astronomy, of geography and map reading, all of which call for appreciation of the value of observation rather than blind faith in the written word, and the physician acquired a new attitude to problems of disease which could be studied at first hand in growing towns. The first signs of change appeared in Italy and Germany where the new order was most vigorous. A great commercial and financial centre such as Florence could not be content with the grammar or collegiate school which taught Latin and rhetoric alone. There was a demand for elementary education, which included reading and writing in the vernacular, as also counting Reading, writing and arithmetic were indispensable to the world of commerce.

Private individuals who founded schools in Italy and Germany were first to respond to the demand for a new type of education. As the merchants grew in wealth and their influence on municipal government increased, they insisted on town council control over such ventures. According to one account, Florence, centre of banking and commerce, already had many schools for the teaching of reading, writing and counting in 1338, and their enrolment far exceeded that of the grammar schools, which confined their instruction to grammar (Latin) and logic. About the same time education of the new type, provided in Germany by private individuals—scriveners, writing clerks, and women—began to be supervised by the town authorities. The Church took up the challenge of its competitors and much litigation ensued In Lübeck, for example, the ecclesiastical *scolasticus* complained that the establishment of schools by the town authorities had reduced his income from fees. According to an agreement reached after long dispute in 1418, the city was permitted to have four such schools and to nominate their masters, but the actual appointments were to be made by the scolasticus, who was to receive one-third of the fees. The curriculum of the school was severely practical. The masters were "to instruct children in writing and reading,

and to teach them good manners, that they may receive reward from God therefor, and the city of Lubeck honour and worship from the world."

In England development was later than on the Continent, but there is much evidence that the art of reading and writing in the vernacular was widespread by the end of the fifteenth century The Paston Letters (1422–1509) bear witness to a high level of literacy among ordinary people, while the rapid spread of printing also shows how widely the art of reading was diffused Landed people were generally educated by private tutors, but commoners received their education in chantries and hospitals and guild schools It was no new practice for rich merchants and others, anxious to secure the singing of mass for the repose of their souls, to leave money to found chantries where schooling was combined with religious exercises. When trade brought prosperity to many in the fifteenth century, the number of endowments rapidly increased, and the chantry priests devoted much of their time to teaching. Chantries were also established by religious guilds, while many trading guilds, as well as individuals, founded hospitals where facilities for education were provided. Such rude and elementary schools taught grammar, which meant Latin, but the sheer incompetence of the teachers and the needs of the pupils necessitated some measure of instruction in the vernacular

When the age of mercantile expansion demanded a type of education that was broader and of wider appeal, Scotland, like England, already had its abbey, cathedral and collegiate schools, as well as its parish schools where Latin was the chief subject taught The mercantile class retained and strengthened the monopolistic powers of their merchant guilds long after such bodies had ceased to serve any useful purpose in England. Firmly entrenched in their civic privileges, the merchants of most royal burghs in Scotland came to control town government, where we find them disputing with the church the control of the local grammar schools Many burgh schools were founded in the fifteenth century In Aberdeen there were early disputes between church and town council as to the patronage of the grammar school. In 1496 Parliament itself intervened in a notable act which declared:

"that all barronis and frehaldaris that ar of substance put thair eldest sonnis and airis to the sculis fra thai be aucht or nyne yeiris of age, and till remane at the grammar sculis, quhill thai be competenthe foundit and haue perfite latyne. And thereftir to remane thre yeris at the sculis of art and Jure, sua that thai may haue knawlege and vunderstanding of the lawis Throw the quhilkis Justice may reigne vniuersalie throw all the realme" (Quoted John Strong, *A History of Secondary Education in Scotland*, 1909, 31)

This Act was little more than a pious resolution designed to enforce the study of Latin and law. In 1521 John Major complained that the "gentry educate their children neither in letters nor in morals"

HUMANISM

While the requirements of the world of commerce promoted the demand for more widespread literacy, with greater emphasis on the use of the mother tongue and proficiency in the new arts of calculation, made possible by the

spread of the Hindu-Arabic numerals, the curriculum of the Catholic universities was undergoing a change under the impact of two movements equally propitious, but in different ways, to the requirements of a wealthy bourgeoisie. It is still common to confuse them by recourse to such labels as *humanism* or the *Renaissance*. The *Naturalistic* movement was almost exclusively a product of cultural contact with the Moslem world via Spain and Sicily and through the Crusades. *Neo-Hellenism*, as we may call the other, was due to the impact on Italy of the Byzantine culture, which did not succumb to the Turks till the fall of Constantinople in 1453.

Of the Naturalistic movement and its significance in the rise of capitalism, there is no need to add to what the reader will find in the first two *Primers for the Age of Plenty*. Expanding capitalism was a cause and result of expanding technology, expanding technology a cause and result of expanding scientific theory. What scientific knowledge we owe to the Alexandrian culture of the ancient world first became available to Western Europe through Arabic texts alone. The spread of Greek scholarship during the Renaissance contributed little to the growth of naturalistic knowledge during the fifteenth and sixteenth centuries. Its only direct significance for the progress of modern science lies in the profound influence which early speculations on the particular structure of matter excited on seventeenth-century thought after the translation of Epicurus by Gassendi

The Renaissance is a misnomer for events which rounded off the Middle Ages in Germany, the Low Countries or Britain, where the culture of the Mediterranean world had never struck deep roots. As applied to Italy, the term is misleading, because the cultural rebirth which occurred there in the fourteenth century was by no means exclusively due to the influence of the Byzantine community on the other side of the Adriatic. While it is true that Greek literature and art had a deep and lasting influence, the growth of capitalism by encouraging enterprise and inquiry, by substituting reason for tradition, by establishing higher standards of material comfort, contributed not a little to the new outlook Moreover, Moslem poetry, Moslem architecture and Moslem horticulture also made a profound contribution to the artistic values of the civilization which flourished under the merchant princes of medieval Italy. What is most distinctive about a change which placed Greek scholarship on the pedestal previously reserved for Latin, in universities where no Greek had been taught, is the familiarization of Europe with the *political* thought of the Greek City State. To an age which sought inspiration in the past, the classics could offer a treasure trove of precedents adapted either to the inclinations of the merchant oligarchies of the Italian peninsula or to the livelier democracies of the new townships of Northern Europe. No earlier literature is more preoccupied with theories of government. No conditions could, therefore, have been more propitious to the spread of a new linguistic cult than the nascent self-government of emergent capitalism in the Europe of the thirteenth and fourteenth centuries.

As the curtain goes up on the sixteenth century, a second facet of the political ideology of emergent capitalism forces itself on our attention with equal relevance to the fervour with which the new fashion spread in Germany and Britain. Neither the political influence nor the economic doctrine of the

Roman Church was favourable to the interests of the newly enfranchized burghers, now literate and now ready to embrace the teaching of reformers who set the authority of the vernacular Bible against that of the Italian Pope To scour the sources of the sacred text for evidence of popish innovations, and incidentally for more certain guidance of providential preference in the matter of parish governance, was now a pastime with equal claims to encouragement as a scholarly pursuit and as an act of piety. To be sure, scholars such as Erasmus, who died in the Catholic fold, played their part and a prominent one in promoting the study of the Greek sources, but it was Protestant democracy that made Greek scholarship the indispensable hallmark of theological erudition and of a "liberal" education. For three centuries the doctrine enshrined in Gladstone's prescription for the education of a statesman and a civil servant has divorced the study of the art of government from knowledge of the new freedoms which scientific discovery and economic achievement have placed within our grasp.

In different ways the new naturalism of Copernicus and Vesalius, the scepticism fostered by the impact of Greek political controversy, the persecution of religious reformers, each contributed to a vast intellectual ferment, the urgency of which makes the period which extends from the mid-fifteenth century to our own time unlike any in history, but it would be a mistake to represent this revolt against authority as a mere conflict of ideologies. The discovery of the New World, and the introduction of printing—especially of printing—supplemented by pictorial illustrations capable of exposing the fallacies of accepted authority, as, for example, in anatomy, speeded up the tendency to question established beliefs and the current scale of values The Roman Church reacted both by suppressing innovations where it had the power to do so, and by strengthening its hold on public education. Of the Scottish universities St. Andrews received its Papal Bull in 1413, Glasgow in 1450 and Aberdeen in 1494 By that time it would be almost true to say that any further facilities for study could only furnish fresh and fertile soil for the seeds of heresy.

The completion of the Reformation left the universities largely what they had been, custodians of man-made law and theological order. Natural science was tolerated, but the encouragement of scientific research was mainly due to the creation of new institutions, the scientific academies or learned societies which first appear in Italy at the beginning of the seventeenth century. The conditions of the time cried out for investigations of manifold variety. The introduction of gunpowder called for a new science of ballistics, deep-shaft mining for the study of air pressure, human respiration and inflammable gases, urban concentration focused attention on epidemic diseases, capitalist farming and horticulture on plant nutrition and pollination, Atlantic navigation on clock dynamics, meteorology and the solar system.

In 1645 a group of Englishmen interested in these various scientific questions agreed to meet weekly to discuss their common problems and so founded what came to be called *The Invisible College* One of its leading spirits tells us of the nature of their discussions

"Our business was (precluding matters of theology and state affairs) to discourse and consider of philosophical enquiries and such as related thereunto,

as physick, anatomy, geometry, astronomy, navigation, staticks, magneticks, chymicks, mechanicks and natural experiments with the state of these studies as then cultivated at home and abroad We there discoursed of the circulation of the bloud, the valves in the veins, the *venae lacteae*, the lymphatick vessels, the Copernican hypothesis, the nature of comets and new stars, the satellites of Jupiter, the oval shape (as it then appeared) of Saturn, the spots in the sun and its turning on its own axis, the inequalities and selenography of the moon, the several phases of Venus and Mercury, the improvement of telescopes and grinding of glasses for that purpose, the weight of air, the possibility or impossibility of vacuities and Nature's abhorrence thereof, the Torricellian experiment in quicksilver, the descent of heavy bodies and the degrees of acceleration therein, and divers other things of like nature" (Quoted Adamson, 181.)

In 1662 this informal and private association was transformed into the Royal Society. Far more than the universities it represented the spirit of a new age It was in close touch with the practical tasks and scientific problems of the time. From them it received its inspiration Indeed Boyle, one of the leading fellows, never tired of emphasizing "that the Good of Mankind may be increased by the naturalist's Insight into Trade" Its importance, like that of the earlier Italian academies and the Paris Academy set up at the same time, lies less in the fact that it pressed the claims of natural enquiry for a place in higher education than in the creation of a new instrument for the furtherance of scientific discovery Hitherto the knowledge of new discoveries had been shrouded in secrecy by the use of Latin as a medium of scholarship and the absence of any medium for the free publication of fresh knowledge The new academies instituted regular proceedings, such as the *Philosophical Transactions* of the Royal Society itself, to publicize the evidence of original contributions to the advancement of knowledge and to encourage criticism unfettered by authorities. Such proceedings were the beginnings of modern technical journals for the promotion of research Their creation invested the process of enquiry with a new dignity and a new sense of individual responsibility.

THE REFORMATION AND EDUCATION

Of itself, the Reformation did not greatly stimulate education in England The reformers were too intent on securing what control of education the Roman Church had hitherto exercized. On the Continent, Luther, Melanchthon and John Calvin were fully alive to the educational needs of the time, and Calvin especially exerted a profound influence on educational practice both in his home town and in France, Holland, Scotland and England In Scotland, John Knox prepared a comprehensive plan for financing education from church endowments. Though his scheme was frustrated by a disgraceful confiscation of church property by the landed aristocracy, its boldness and completeness remained an inspiration to the country for generations to come. According to the plan he put forward, there would be an elementary course for all children up to the age of eight, next a grammar school for those between eight and twelve, then a college or higher grammar school for pupils up to the age of sixteen The crown of the system for the gifted few

was to be the university, so that at the age of twenty-four the man was ready to "serve the Churche or Commoun-wealth, unless he be fund a necessarie Reidare in the same Colledge or Universitie." In the country districts the parish minister was to provide for schooling at the elementary grade, but in every town of consequence there was to be a grammar school, and in larger centres of population colleges would feed the universities of St. Andrews, Glasgow and Aberdeen.* No father was to be allowed to "use his children at his awin fantasie, especiallie in thair youth-heade" Both rich and poor were to be required to attend school, the former at their own expense and the latter supported by the church (Fig 108).

The plan was a bold novelty, little to the taste of a thrifty Parliament, which rejected it The outcome was that the reformed church secured its main objective—control of education Until the nineteenth century, the Church of Scotland ruled elementary school administration and organization. In the burghs the town councils maintained the claim to supervise and, in some cases, to appoint and to pay the teachers. Such schools were the first in Britain to adopt a curriculum in keeping with the new economic and social order. Meanwhile, alienation of church lands and destruction of endowments in England and in Scotland resulted in the ruin of many medieval grammar schools and made the existence of many others precarious; but the social and intellectual ferment of the age fostered increasing interest in education and the growing prosperity of the middle class furnished necessary funds. In the reign of Elizabeth, Oxford and Cambridge increased their endowments. In Scotland the enthusiasm of the citizens of Edinburgh led, in 1582, to the creation of a new university—originally, the town's college. Among the great schools founded at this time were Shrewsbury, 1552, Westminster, 1560, Merchant Taylors', 1561, Rugby, 1567, Harrow, 1571, and Charterhouse, 1612. In the hundred years between 1501 and 1601, 185 endowed schools came into being. In the next fifty years the number was 186 †

Contemporaneously, there was also lively interest in educational methods. Such men as Roger Ascham and Francis Bacon began to write about education to ask how far existing schools and universities met the educational needs of a society shaking off an isolation of centuries and now showing a genius for trade and colonization Some schools, such as Charterhouse, took cognisance of current affairs "It shall be [the master's care]," runs the foundation deed, "and the usher's charge to teach the scholars to cypher and cast an accompt, especially those that are less capable of learning and fittest to be put to trades" But the majority of the grammar schools in England refused to move with the times, and were already becoming exclusive It is not surprising that seventeenth-century leaders of thought were impatient, and the unsuitability of the medieval curriculum for the requirements of the new capitalist age was emphasized again and again. Foremost among the innovators was the Bohemian Comenius, who sojourned

* Aberdeen had two universities down to 1860, when they united. They were called "University and King's College of Aberdeen" and "Marischal College and University of Aberdeen."

† James, *Social Policy during the Puritan Revolution*, 314.

in England a while. Writing in 1642 on *A Reformation of Schooles*, Comenius declared that the so-called learned men were seldom a success in the ordinary business of life. Teaching was dull and the subjects studied—"Grammatical, Rhetorical and Logical Toyes"—were gladly forgotten as soon as men set about the real business of life:

"Not only do the learned seldom excell those who are illiterate in the study of virtue . . . but also in the dexterous businesses they are for the most part excelled by them. For the most part the deepest Philosophers and Divines, though they seem as Eagles to themselves, with their abstracted speculations, yet are they as blind as Moles in matters of this life of human society"

Comenius found a sympathetic audience for his views among the personnel of the Invisible College and elsewhere. Notable among his supporters was Hartlib, the author of *A Brief Discourse concerning the Accomplishment of our Reformation*, published in 1647 This tract stressed the importance of education "as the main foundation of a Reformed Commonwealth, without which no other work of Reformation will ever be effectual" William Petty, one of the founders of the Royal Society, declared that utility should decide the curriculum. All children, he said, should attend school, and instruction should begin with observation of "all sensible objects and actions, whether they be natural or artificial, which the educators must on all occasions expound unto them" They should be taught reading and writing and arithmetic and handicraft. During the Commonwealth, discussion on the scope and method of education reached a new level Indeed Parliament itself inquired frequently into the subject, and in 1649 made the first grant of public money for English education. A few years later it appointed visitors to regulate both the universities and the schools. "The intervention of the State," says Miss James (p. 320), "is perhaps the most interesting feature of the educational history of the time", but the efflorescence sponsored by such men as Hartlib, Petty and Milton was short-lived. The Restoration brought progress to a standstill by the Act of Uniformity (1662), which severely penalized all who refused to conform to the Church of England Teachers in universities and schools were now required to "conforme to the liturgy of the Church of England" and to abjure the political doctrines of the Commonwealth Those who refused to embrace the Anglican faith were expelled Thus entrenched in their privileged position and isolated from the main stream of ideas, the universities maintained a medieval curriculum. Any teaching in science or in new philosophy was undertaken by private teachers without the official approval of the authorities (Fig 109)

SCOTLAND AND THE PARISH SCHOOL

Though the bold plan of John Knox was not accepted by the Edinburgh Parliament, the Kirk did not give up the fight for its own claims It held firmly to the view that education is the province of the Church, and nowhere is its point of view more clearly stated than in the First Book of Discipline (1560).

"Seing that God hath determined that his Churche heir in earth," says the First Book of Discipline, "shall be tawght not be angellis but by men, and seing that men ar born ignorant of all godlynes, and, seing, also, now God ceassith to illuminat men miraculuslie, suddanlie changeing thame, as that he did his Apostlis and utheris in the Primitive Churche off necessitie it is that your Honouris be most cairfull for the virtuous educatioun, and godlie upbringing of the youth of this Realme, yf eathir ye now thirst unfeanedlie (for) the advancement of Christis glorie, or yit desire the continewance of his benefits to the generatioun following For as the youth must succeed till us, so aucht we to be cairfull that thei have the knawlege and eruditioun, to proffit and confort that whiche aucht to be most deare to us, to wit, the Churche and Spouse of the Lord Jesus "

An Act of 1567 admitted the claim of the Church to supervise education and to enforce acceptance of the Confession of Faith on all teachers in schools and universities; but the Church never ceased to condemn "the wrangous using of the pitrimonie of the Kirk," to the great loss of the Church, the schools and the poor. It pressed for the application of certain common lands to the purpose of education; and in the seventeenth century efforts were once more made to carry out the proposals of Knox In 1616 the Privy Council decreed that wherever possible every parish should have a school and a fit person as schoolmaster This enactment appears to have been largely ignored. Schools could not be built and carried on without money. So little, if anything, was done till 1633, when it was decreed that *heritors* (Scots landowners) should be taxed for the maintenance of schools. This was more easily said than done, and it turned out that heritors were most unwilling to pay up. Five years later, the General Assembly complained that the lack of schools "doth greatly prejudge the grouth of the Gospel, and procure the decay of religion." Accordingly, presbyteries were ordered to make provision for the establishment of schools in every landward parish and to provide "men able for the charge of teaching of the youth " Finance was still the chief stumbling-block On the initiative of the General Assembly in 1646, Parliament passed "An Act for founding Schools in every Parish", and to make the proposal effective the presbyteries were authorized to "set down a stent upon every ones Rent of stock and teind in the Parish, proportionally to the worth thereof, for maintenance of the Schoole, and payment of the Schoole master's stipend "

This Act gave a great stimulus to education in Scotland, and many new schools were established. Still it would be wrong to assume that every parish soon had its school. The heritors, who had responsibility for providing the school building and the master's salary, were often ill disposed to act. To provide for such a contingency the Presbytery had been authorized to nominate "twelve honest men" to secure the effective operation of the Act, but it was difficult for them to take action against powerful landowners. When an inquiry was made into the situation at the close of the century, it was reported that many parishes had no school and the inadequacy of the schoolmaster's salary very often led to a curious combination of duties, as at one place, where he also acted as session-clerk, precentor, kirk officer, and *maker of graves for the dead*. The main provisions of the Act of 1646,

which had been repealed at the Restoration, were re-enacted with certain additions in 1696. The whole procedure for founding parish schools and providing for their financial needs was then tightened up. "These two Acts, 1646 and 1696," says Strong, "were the legal foundations of the Parochial School System of Scotland. Down to 1803 no further legal provision was made for schools."

Meantime the Church kept a tight hold on education. On the re-establishment of Presbyterianism, in 1638, the General Assembly proceeded to enforce their decision of 1565, that the

> "Principall, Regents, and Professours within Colledges, and Masters and Doctors of Schooles, be tryed concerning the soundnesse of their judgement in matters of religion, their abilitie for discharge of their calling, and the honesty of their conversation."

By successive steps the Assembly took under its supervision the inspection of schools, the appointment of schoolmasters and the general control of curriculum in school and university Before the century had run its course the Kirk was exercising rigorous control over the religious, intellectual and social life of the country. The repeal of the Episcopacy Act, in 1690, confirmed the Presbyterian Church in its privileged position, and its jurisdiction over education was fully recognized In the same year Parliament decreed that all teachers in universities and schools should be required to subscribe to the Confession of Faith, to take the oath of allegiance, and to be of "a pious, loyal and peaceable conversation and of good and sufficient literature and abilities for their respective Imployments and submitting to the government of the Church now settled by Law." A few years later another Act declared "that all Schoollmasters and Teachers of Youth in Schoolls are and shall be lyable to the tryall judgement and censure of the Presbyteries of the Bounds for their sufficiencie qualifications and deportment in the said Office"

In Scotland as in England the Church thus retained control of education, and all teachers were required to accept the established religion In Scotland, however, the form was democratic and attracted the type of Nonconformist excluded in England by the Act of Uniformity Thus education both in school and university was more in touch with the changing social order and hence was likely to be more effective than in England. Without doubt, the pre-eminence of Edinburgh and Glasgow universities in the eighteenth century was in part due to the freer atmosphere of Scottish education at that time, and hence to facilities it could offer vigorous minds. Conversely the decadence of Oxford and Cambridge may be attributed in part to the exclusion of an enlightened segment of social personnel

EDUCATION AND THE TEST ACTS

We have seen that the promising educational progress of the Commonwealth came to an untimely end at the Restoration Tolerance made way for persecution, and freedom of conscience for religious bigotry. Parliament proceeded to pass a number of Acts designed to limit the rights and opportunities of dissenters and to entrench more firmly than ever the Church of

England as the established Church of England The Conventicle Act prohibited meetings of dissenters for worship. The Five Mile Act forbade any dissenting minister or schoolmaster to come within five miles of any chartered town. The Corporation Act reserved public office for members of the Anglican faith. More important in this context are the Act of Uniformity and the Test Act. The Act of Uniformity passed in 1662 reaffirmed an Elizabethan statute which had made the Anglican prayer book the only legal form of worship.

"All masters and other heads, fellows, chaplaines, and tutors of, or in, any colledge, hall, house of learning, or hospital, and every publique professor and reader in either of the Universities and in every colledge elsewhere . and every School master keeping any publique or private schoole, and every person instructing or teaching any youth in any house or private family as a tutor or a schoolmaster" were required "to conforme to the liturgy of the Church of England" and to abjure the Solemn League and Covenant The Act also decreed that the heads of all colleges of the universities and the headmasters of the great public schools of Westminster, Winchester and Eton should subscribe to the Thirty-Nine Articles of Religion and the Book of Common Prayer, on penalty of deprivation.

The Test Act, passed in 1672, declared that the holders of civil and military offices must take the communion according to the rites of the Church of England This Act had been passed primarily to exclude Roman Catholics, but clearly it had a much wider application and included Nonconformists as well These various enactments drove a wedge between Anglican and Dissenter, creating a social cleavage between "church" and "chapel," persisting throughout the Victorian era In the course of time some of the more irksome restrictions on the liberty of dissenters were allowed to lapse or were openly circumvented, but the obnoxious Acts remained on the Statute Book. Educationally the most serious result was the exclusion of Nonconformists from the Universities of Oxford and Cambridge As late as the nineteenth century the position at Oxford was that candidates had to subscribe to the Thirty-Nine Articles before matriculation. At Cambridge, Nonconformists, though admitted to lectures, were denied access to scholarships, fellowships and degrees. At both Universities, each college had its chapel at which attendance was compulsory and the services were, as now, exclusively conducted in accordance with the rites of the Church of England.

Such a vigorous enforcement of an official religion had effects both immediate and far-reaching Excluded from their livings and from the universities, Dissenters set about establishing schools or "academies" of their own At first, many were small private schools conducted and managed by individuals who had themselves suffered from the restrictive legislation. After the passing of the Toleration Act many more were founded on a wider basis with ample funds and scholarships to assist poor students. In eighteenth-century England, these dissenting schools, providing education for children of Nonconformists as well as training for their ministry, were in the van of educational progress Their curriculum showed a lively appreciation of contemporary needs and the textbooks used were, for the time, often fresh

and stimulating.* In some measure they fostered speculation and a spirit of inquiry in sharp contrast to the religious and intellectual apathy of the orthodox schools as well as of Oxford and Cambridge. They welcomed pupils no matter what their religious convictions were. Indeed, some men who ultimately became bishops of the Church of England received an early education in the academies of the Dissenters For the most part, the pupils of these academies were unable to enter Oxford or Cambridge because of the religious tests enforced. They were therefore encouraged to go to the more thriving and, at that time, progressive universities of Edinburgh and Glasgow or abroad to Utrecht and Leyden Though many such schools had closed before the end of the century, Nonconformity was still making steady progress in town and country alike. According to an official inquiry of 1811 in parishes of over one thousand inhabitants, the number of Nonconformist chapels exceeded the number of Anglican churches, being 3,438 as against 2,533. Halévy says, "On the evidence we may conclude that while the nominal members of the Establishment still constituted an enormous majority, the Nonconformists already equalled, if they did not exceed, the Anglicans who practised their religion"† (Figs. 110 and 111).

The exclusion of Nonconformists from Oxford and Cambridge was without doubt a great loss to university education in England. It was less a loss to Dissenters themselves. Both universities were mainly training places for the Church and the main subjects—the classics and theology—were taught as they had been taught in the Middle Ages There had, in fact, been a deterioration in the standard of education since the Commonwealth, and throughout the eighteenth century the universities had sunk into a state of mental and moral lethargy Oxford, where the young scions of the ruling class went to spend a few years in luxurious and riotous living, was pre-eminently Tory, viewing every new movement of thought with suspicion. There were no entrance examinations. Most of the scholarships and fellowships were restricted to founders' kin, to particular localities or to pupils of particular public schools. For example, Winchester had exclusive control of fellowships at New College, Oxford, just as Eton had at King's College, Cambridge. Even the examination for a degree was a farce For the B A it consisted of three questions in theology, logic and grammar, made public in advance; and standard answers were procurable. Thereafter the candidates had dinner with the Regent Master who had conducted the performance Wealthy students kept hounds, drank hard and lived riotous days. "Except praying and drinking, I see nothing else that it is possible to acquire in this place," wrote Judge Jeffrey to a friend in Scotland (1727) Not until the close of the eighteenth century was there any start of reform of studies or tentative efforts to institute real examinations, but a possibly final assault on the medieval authoritative traditions of Oxford did not begin before the middle of the Victorian period (Fig 112). A shrewd foreign observer writes:

"The English were a nation of manufacturers and merchants governed by an aristocracy who made it a point of honour to appear ignorant, indeed to be

* For an account of these academies see H McLachlan, *English Education under the Test Acts*, 1931.

† *A History of the English People* (Penguin Books), iii, 51.

ignorant of the economic foundation on which rested both the national greatness and their own And it was at Oxford that this aristocracy finished its education. It would have none of a scientific education which it scorned as plebeian and materialist It demanded an education exclusively classical." (Halévy, iii, 174.)

At Cambridge matters were somewhat different During the Restoration period Bishop Wilkins, brother-in-law to Cromwell and ardent in his support of religious toleration, had been Master of Trinity. Newton represented the University as a Whig in the Parliament of 1688. It remained a Whig university and continued to show leniency to Nonconformists, as in 1775 when it abolished religious tests for undergraduates, though of necessity forced to retain them for fellowships and degrees At the close of the century Cambridge became a centre of the evangelical movement which was in the forefront of the movement for the abolition of slavery; and the University itself played a lively part in it. Though there was little scientific activity within its precincts during the eighteenth century, the pursuit of mathematics persisted under the momentum of the European reputation the University had gained from Newton's eminence A system of genuine examinations had been established over a century before Oxford followed suit, but eighteenth-century Cambridge was by no means in the forefront of the intellectual advances of the latter half of the eighteenth or first half of the nineteenth century, when scarcely one of the leading scientists, inventors or political philosophers was either a Cambridge or an Oxford man The English universities had lost more than the Nonconformists who were excluded from their privileges The very people who could have infused new life into them and brought them into touch with modern life had perforce to go elsewhere Basil Williams sums up the position when he says:

"But at neither university was either the obsolete curriculum or the dons, mostly die-hard, port-drinking tories even at Cambridge, likely to stimulate intelligent interest in public affairs. It is significant that at neither university do the professors of history, instituted by George I in 1724 for the express purpose of training public servants, appear to have given any lectures during this period To find men taking the most enlightened views on social conditions and animated with the greatest public spirit one would have had to look mainly in the ranks of the dissenters, whose special schools had advanced beyond the old dry methods, and who were driven, owing to religious tests at Oxford and Cambridge, to the more enlightened Scottish or Dutch universities." (*Whig Supremacy*, 135)

Even as what they claimed to be first and foremost, training places for the Church, the English universities were inadequate Though all candidates for ordination were drawn from the universities of Oxford and Cambridge, neither possessed any special organization for the teaching of Christian doctrine At Oxford there was one question in theology asked of all candidates at examination At Cambridge no theology entered into any examination paper for the degree

"The entrance examination once passed, and it was elementary in the extreme, not to say childish, students, who were not the eldest sons of gentle

families, and did not possess sufficient industry or capacity to face more difficult examinations, could proceed without further delay to the clerical status. It is true that to hold any benefice, episcopal ordination was indispensable, and that ordination involved a preliminary examination by the bishop or his chaplain, whose object was, or was supposed to be, to discover the candidate's intellectual and moral endowments But, as all the world knew, this examination was a mere formality." (Halévy, iii, 13)

Meanwhile, the Scottish universities, especially Edinburgh and Glasgow, were centres of intense intellectual activity Here, too, there were religious tests. Professors, regents, masters and others were required to "acknowledge and profess and subscribe the Confession of Faith," and the Church of Scotland, through its General Assembly, kept a close watch over the universities till the middle of the nineteenth century But at no time was any large section of the community excluded. Indeed the Church, so closely associated with education through the parish schools, had encouraged poor students to go forward to the university. In 1645 the General Assembly had decreed that every presbytery should provide an annual scholarship for four consecutive years, thus insuring a steady flow of recruits for the ministry. Being poor, Scotland had not the nice class distinctions which were a leading characteristic of English society; and her universities never limited their appeal to one social level. Indeed the absence of the so-called "public schools" and the general prevalence of co-education can be partly attributed to the poverty of the country The fact that the Scottish universities drew their students from all ranks of society between which there were no wide differences with respect to social and economic status doubtless contributed to their vitality during the eighteenth century Being poor on the whole, the students were determined to make full use of their opportunities. They had neither money nor inclination to indulge in expensive tastes nor to waste time and substance in extravagant or riotous living

The poverty of eighteenth-century Scotland contributed in another way to the vigour and enterprise of her universities Realizing that their country was backward economically, Scotsmen determined to improve matters and bring her into line with her richer neighbour In the early eighteenth century this drive for greater efficiency and better standards of living became a national movement which gained widespread support and aroused intense enthusiasm amongst all classes It is more than mere coincidence that the Scottish universities showed great intellectual activity at the same time Meanwhile the Industrial Revolution, which started in the settled conditions subsequent to the Jacobite insurrections, recreated the temper of Commonwealth England when the *Invisible College* came to birth.

In 1720 Edinburgh had established the Medical Faculty which was to gain a high reputation both at home and abroad Along with Glasgow it remained the main centre of medical education in Britain during the eighteenth and nineteenth centuries Both universities were noteworthy for their contributions to the progress of science, on which the Industrial Revolution rested. Francis Home, at Edinburgh, was investigating the chemical process of bleaching as well as the chemistry of agriculture, while at Glasgow, Black, trained under William Cullen, who had established its medical

school in 1744, was laying the theoretical foundations of steam technology, while encouraging his assistant, James Watt, to carry out his experiments which revolutionized power production. Other departments of university study were infected with the virus of originality. When Francis Hutcheson, appointed professor of moral philosophy in 1729, broke away from the medieval tradition of lecturing in Latin, he created the forum from which Adam Smith, a successor in the same chair, gave to the world the *Wealth of Nations*. Such men attracted students from far afield Denied access to their own universities, Nonconformists by the hundred came north to train as doctors and teachers, while Scotland poured her graduates into England

EDUCATION AND THE POOR

Originally, the *grammar schools* had been designed to provide education in Latin for all those likely to benefit from such instruction. A variety of circumstances helped to make them more and more exclusive. The poverty of the foundations made inevitable some means of supplementing income and the obvious way was to charge fees This had a double effect It increased their resources and it limited the social range from which pupils were drawn. This was *en rapport* with the wishes of many people in the sixteenth and seventeenth centuries, though the view that grammar school education should be reserved for the upper classes called forth a vigorous rebuke from Cranmer in 1541.

"I grant much of your meaning herein as needful in a common wealth; but yet utterly to exclude the ploughman's son, and the poor man's son from the benefits of learning . is as much to say, as that Almighty God should not be at liberty to bestow His great gifts of grace upon any person, nor nowhere else, but as we and other men shall appoint them to be employed, according to our fancy and not according to His most Godly Will and pleasure, who giveth His gifts both of learning, and other perfections in all sciences, unto all kinds and states of people indifferently wherefore, if the gentleman's son be apt to learning, let him be admitted, if not apt, let the poor man's child that is apt, enter his room "

The grammar schools thus became the secondary schools of the rich. Meantime a movement was growing to provide elementary education of a utilitarian character for those who had no prospect of proceeding to "grammar." In the course of the seventeenth century it gained strength, and some reformers stressed the part the state should play in it What elementary education was available to the less prosperous levels of society was largely provided by small private schools, but some foundations, such as Christ's Hospital (the Blue Coat School) and Westminster, were explicitly created to educate the poor in reading, writing and arithmetic, and to teach them a trade Aggressive capitalism had not yet adopted its later intolerant attitude to the children of the poor They were the victims of circumstances, to be rescued from the vices of idleness and moral degradation Accordingly, suitable schools should have a strong religious bias and an essential part of the curriculum should be a training in a craft. Such were the views of those who promoted the Charity School Movement Through the efforts of Thomas

Bray and Colonel Colchester, the *Society for the Promotion of Christian Knowledge* was established in London in 1699; and at once it set about its task. The movement spread rapidly throughout the country. The S.P.C.K. confined its attention mainly to supervision and encouragement. The schools established under its auspices were financed locally from private subscriptions and church collections, funds being vested in trustees who became, in effect, managers of the schools. "The combination of private maintenance and public *status*," says Adamson,

"resulted in that 'voluntary system' which carried on the work of public elementary instruction for the next one hundred and seventy years, while the studies of the charity school made the tradition that 'the three R's' are the typical curriculum of the elementary school and the essential basis of all education."

Teaching of crafts occupied an important place in the curriculum, and education of this sort aroused the greatest enthusiasm among the middle class, who believed that children of the poor should be trained for industry and launched on their industrial careers as quickly as possible. This view was put bluntly by Mandeville (*Essay on Charity Schools*) in 1723:

"Few children make any progress at school, but at the same time they are capable of being employed in some business or other, so that every Hour those of poor People spend at their Books is so much time lost to the Society. Going to school in comparison to Working is Idleness, and the longer Boys continue in this easy sort of Life, the more unfit they'll be, when grown up for downright Labour, both as to Strength and Inclination. Men who are to remain and end their days in a Laborious, Tiresome and Painful Station of Life, the sooner they are put upon it at first, the more patiently they'll submit to it for ever after."

The fact that attendance of orphans and other pauper children relieved the rates was another reason why the charity schools were popular with the prosperous. The same writer says.

"The generality are so bewitched with the usefulness and excellency of them (the charity schools) that whosoever dares openly oppose them is in danger of being stoned by the rabble. . . . The governors are made of the middling people, and many inferior to that class are made use of, if the forwardness of their zeal but overbalance the meanness of their condition."

So quickly grew the movement that there were charity schools by 1727 in all but two of the counties of England and Wales, with a total enrolment of 22,024 boys and 5,830 girls. Thereafter the increase slowed down until it ceased altogether. "By 1760," says Adamson,

"it was clear that they had failed to fulfil the promise of fifty years earlier, while the need for popular education had become much more pressing."

In 1709 a similar organization was founded in Scotland, where many parishes, despite the Act of 1696, still had no schools. In 1729 the General Assembly urged Presbyteries to bring action in the Court of Session against

recalcitrant heritors who had failed in their responsibility to provide them. The situation was complicated by the fact that many parishes were very large and could not be served by one school, moreover rapid growth of population and the rise of new manufacturing towns and new centres of fishing made the parochial system inadequate. To meet the deficiency, voluntary schools supported mainly by religious bodies were grafted on the parochial system, which enjoyed legal status Of these the *Society for the Propagation of Christian Knowledge* was most important At first it appears to have confined its activities to religion, reading, writing and arithmetic; but in 1728 it was authorized by Charter,

"to cause such of the children educated at their schools as they should think fit, to be instructed and bred up to husbandry and housewifery, or in trades and manufactures, or in such like manual occupations as the Society, or their Directors, should think the most practicable and expedient "

In co-operation with the Board of Trustees, set up in 1727 to encourage agriculture, fisheries and manufactures, spinning schools were established, especially in the Highlands, and as late as 1872 the S P.C.K supported 76 sewing, in addition to 194 ordinary, schools in Scotland Such elementary education as the majority of English people received in the closing years of the eighteenth century was provided by the various religious movements of the time. The promoters were little concerned with the educational demands of the new age In Hannah More's words, the poor were to be trained "in habits of industry and piety " A representative of moderate conservative opinion in 1807 states.

"It is doubtless desirable that the poor should be generally instructed in *reading*, if it were only for the best of purposes—that they may read the Scriptures. As to *writing* and *arithmetic*," he adds, "it may be apprehended that such a degree of knowledge would produce in them a disrelish for the laborious occupations of life "

A minister giving evidence before a committee in 1833 declared that writing was not taught in any of the church schools, and that, in fact, many of the subscribers objected to teaching the poor to write. The two principal religious societies active at that time were the *National Society for promoting the Education of the Poor in the Principles of the Established Church*, founded in 1811, and the *British and Foreign School Society*, founded in 1814. They followed the educational practice of Andrew Bell and Joseph Lancaster, who held that the older children should teach the younger. This thrifty device reduced cost, and perhaps encouraged a spirit of co-operation in school life.

Such were the schools to which the bulk of English children looked for education in the first half of the nineteenth century. The creation of a national system of education was thus delayed in England by rivalry of religious sects, as well as by the traditional contention that education is the prerogative of the Church. Whitbread's Bill for state provision of elementary education in England was rejected by the House of Lords in 1807, and in 1820

Brougham's somewhat similar Bill was withdrawn because of Church opposition after a second reading But the financial burden of education could not be sustained indefinitely by private subscription Growth of industrialism and mechanization of industry had made elementary education for the masses essential The rising voice of labour demanded an interest in political affairs and civic government commensurate with their economic importance, and this could be effective only if educational facilities were made available. A first step was taken in 1833 when a governmental grant of £20,000 was made "for the purposes of education."

It was a compromise The money was to be shared by the two religious societies mentioned above with a view to provision of school buildings. A condition laid down was that the grant would be payable only if half the cost of erection was raised by voluntary contribution. At the same time a grant of £10,000 was made for a similar purpose in Scotland, and Parliament continued making these grants in subsequent years. Meanwhile, urbanization made it necessary to increase the outlay and to implement more centralized control over education. In 1838 a committee of the Privy Council was appointed to administer a larger state grant; but even this met with formidable opposition. Led by the Archbishop of Canterbury, the House of Lords made their protest direct to the Queen. Dr. Kay, secretary of the Committee, was firmly convinced that the solution of the problem lay in the civil control of education, but public opinion was not yet ready for this. The Chartist movement was at its peak and the country was seething with discontent To the middle and upper classes it seemed more necessary than ever to insist on religion as an antidote to the "pernicious opinions" of the masses

In 1846 the parliamentary grant was increased to £100,000. The view that state aid and supervision must be provided on an increasingly large scale was gaining ground. Voluntary sources were obviously incapable of meeting the growing need, and only the rivalry of religious sects made it difficult to throw the burden on the rates Then, as later in 1902, English ratepayers objected to contributing to the upkeep of denominational schools other than their own. In 1853, when Lord Russell proposed to authorize towns of more than 5,000 inhabitants to levy educational rates, he was met with fierce opposition, and the Bill had to be withdrawn. However, the Privy Council Committee contrived to make capitation grants to schools contingent on local contributions of equal amounts In 1856 the State's expenditure on education had become so large that a department of education was set up, and direct representation was given to it in Parliament The situation, arising from such divided control, had now become intricate Two years later the *Newcastle Commission* was appointed to examine it. This body made important recommendations about elected local boards of education with powers to levy rates, to examine children in reading, writing, and arithmetic, and to pay grants on the basis of results, a policy which appealed to the Victorian industrialist. This last was in fact the only recommendation accepted (Fig. 113).

Time was fast approaching when the State was to accept responsibility for English elementary education. The number of schools and pupils had risen very rapidly, but the inefficiency of the system was repeatedly revealed

by investigators In 1850 it was reported, "even of the children of the poor who have received some instruction, very few know anything 'beyond the rudiments' " In the Midlands 75 per cent left school without being able to read the Bible, then the common textbook even for arithmetic School accommodation was pitifully inadequate. There was little or no teaching apparatus, an incompetent teaching profession thronged with uneducated and "worse than incompetent" men and women, suffering from physical infirmities which incapacitated them from other employment Such were a few of the indictments levelled against the English educational system at that time, which was far behind the educational system of Scotland and of several Continental countries. The outcome of this volume of criticism was the famous *Education Act* of 1870. Inevitably it tried to steer a middle course between the conflicting claims of religious factions and secular needs. Where denominational schools were fulfilling a useful purpose and working efficiently, they were left alone. Elsewhere schools were established by locally elected bodies with power to levy rates, to manage the schools and to make education compulsory. In these schools denominational teaching was excluded It was left to the teachers to provide religious training without the intervention of the clergy The Act did not, as often suggested, establish free education for all Only if parents were unable to pay were they excused fees. Still it was a notable milestone "Henceforth," says Woodward, "there were no areas in England without schools, and no children grew up without elementary education, because their parents were poor" (*Age of Reform*, 453–64).

North of the Border, the parish school system was extended in the nineteenth century to meet the needs of a shifting and growing population. Where parishes were too large to be served by one school, *quoad sacra* districts were created where "side schools" were established, but even this provision was insufficient. Large numbers of children were excluded from educational facilities by distance, and the number of private schools was on the increase The Disruption of the Scottish Church in 1843 also shattered the unity of the basic educational system Schoolmasters who refused to take the tests required of them by the Established Church had now to resign their posts, and the new Free Church set about founding schools of its own. In Scotland this was the beginning of rival denominational schools, but the Free Churchmen happily repudiated any suggestion that their schools were designed to maintain their viewpoint

> "We do not plant our schools as nurseries of Free Churchism," they declared, "nor do we ask our teachers to make proselytes to Free Churchism of their pupils Our schools are really as simple and purely elementary schools for giving a good general education to the young, as were the best parish Schools before the disruption"

In Scotland a large body of dissent came into being too late to produce the deplorable results which the English Test Acts had brought in their train As in England, the movement of the time was in favour of some degree of state supervision and assistance Already there were Acts of Parliament which threw responsibility for the supervision of education on kirk sessions,

and from 1833 onwards Parliament had granted funds. The most striking and significant changes had occurred in the burghs Many of the burghs had grammar schools whose history went back several centuries. They specialized in classics and in preparing pupils for the universities. Before the eighteenth century had run its course, there was a reaction against the traditional instruction provided in such schools The pendulum swung in the opposite direction. The Town Council of Ayr was a pioneer in the new movement. As early as 1746 they adopted for their Grammar School a curriculum which supplemented Latin and Greek by arithmetic, geometry, bookkeeping, navigation, surveying, Euclid, algebra and natural philosophy Such a course, said the Town Council, was "most proper for promoting the purposes of education, that is, the training up of the youth in the knowledge of literature, and preparing them for business in the most expeditious and effectual way possible." A memorial presented to the Town Council of Perth in 1760 stated very clearly and strongly the view that education should be related to the conditions of the age:

"In times not long past, all learning was made to consist in the grammatical knowledge of dead languages, and skill in metaphysical subtilities, while what had an immediate reference to life and practice was despised. But Providence has cast our lot in happier times, when things begin to be valued according to their use, and men of the greatest abilities have employed their skill in making the sciences contribute not only to the improvement of the physician, lawyer, and divine, but to the improvement of the merchant, mechanic, and farmer, in their respective arts. Must it not, then, be of importance, to put it into the power of persons in these stations of life, to reap that advantage science is capable to afford them."

The outcome was the founding of Perth Academy in 1761. It was the first of its kind in Scotland. Instruction was to be given in English and the scheme of study was to be as follows: *first year*, natural science, mathematics, navigation, astronomy and English; *second year*, natural philosophy, practical geometry, civil history, logic and the principles of religion. Perth's example was followed by other towns, where similar academies were established. Some absorbed or superseded, others remained in rivalry with the older grammar schools. The Argyll Commission, which reported on Scottish education in 1868, showed how widespread were educational facilities in this country. The burghs, well supplied with grammar schools, academies and parish schools, met the needs of the middle class; but there were many blank patches in the Highlands and in the new industrial towns. Of 98,767 children between the ages of three and fifteen, only 35,565 attended school in Glasgow "The apathy and indifference of parents," said one of their assistant-commissioners, "are the chief causes why so many children attend no school"; but they add, "the attendance of children at school is seriously affected by the demand for their own labour and in a less degree by the wages which their parents earn."

The *Education (Scotland) Act* of 1872 established a central authority—the Scotch Education Department—elected school boards for each parish to which were transferred all burgh schools (grammar, academies and high

schools) and all parish schools established by statute The school boards thus superseded the town councils of the burghs and the ministers and heritors in the country. The authority of the presbyteries over education disappeared Since grants were payable in respect of these various schools, "the Department" was able to enforce standards of uniformity and competence All schools coming under the control of the School Boards were termed *public* schools, as indeed they were. The English use of the epithet is an outstanding example of the English gift for irony.

SECONDARY EDUCATION

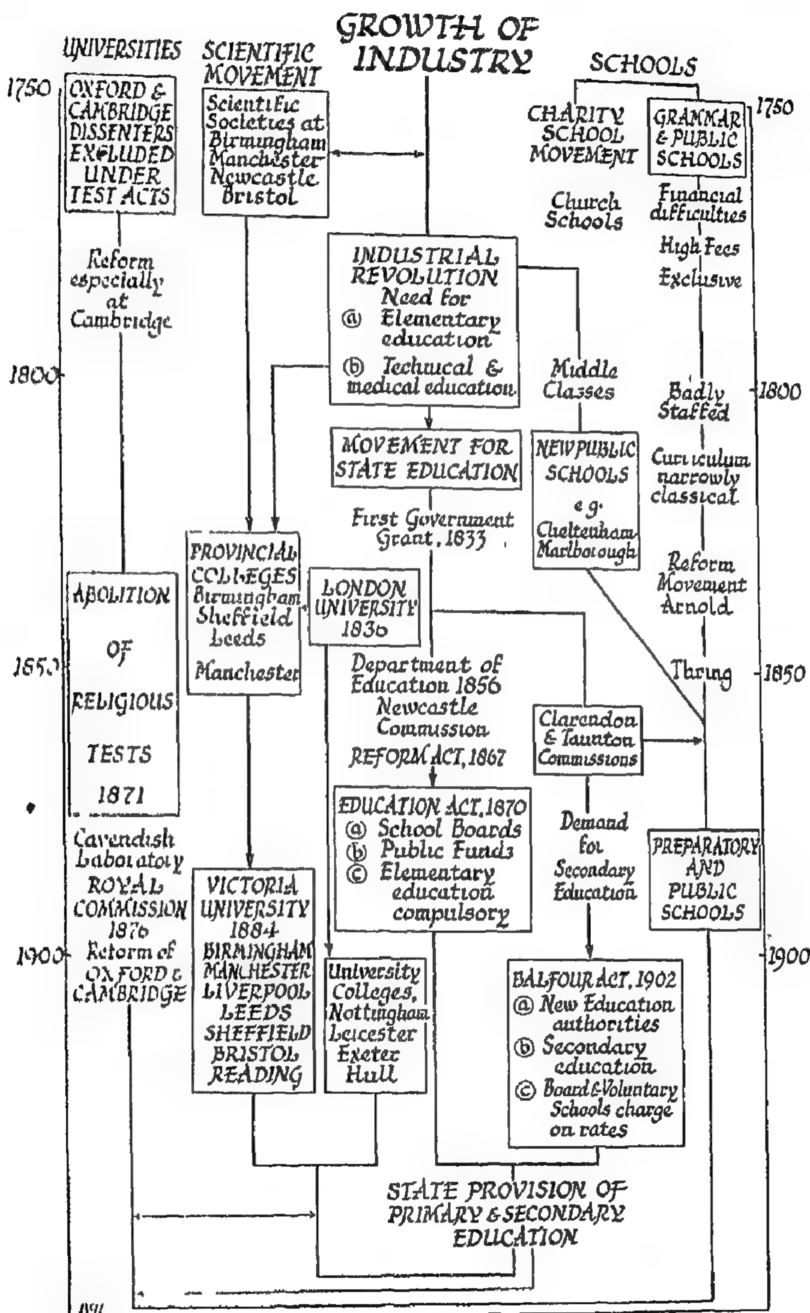
In Scotland, the parish schools had long prided themselves on the opportunities they offered to the "lad o' pairts", and many a university student came straight from the hands of the parish schoolmaster There could be no secondary education for the English masses until there were adequate facilities for elementary education So in nineteenth-century England, as Woodward points out, secondary education was restricted to the middle and upper classes. There were three types of schools providing secondary education of a sort—grammar schools, "public" schools and private schools The last-named had been started by reformers dissatisfied with the older types. The distinction between "public" schools and grammar schools had emerged towards the end of the eighteenth century The former were those schools which had survived the vicissitudes of time and had fortified their financial resources by taking boarders, the latter had decayed because the income bequeathed to them had practically vanished owing to misappropriation of funds by trustees and change in value of money Like the universities of Oxford and Cambridge, schools of either sort had long since lost what vitality they had derived from the ferment of the Renaissance The statutes which governed their curriculum were two hundred years out of date, yet a judgment of 1805 declared that it was illegal to change them. So a school founded in the Elizabethan Age to teach Latin and Greek could teach no other subjects in an age of industrialism Not until 1840 was this judgment reversed

Not only was the curriculum confined to subjects that had little relevance to modern life, but the schools were under-staffed and badly managed and their management was often corrupt. When the Duke of Wellington talked about the playing fields of Eton he was thinking less of cricket than of cracked heads Professor Archer* thus sums up the state of affairs·

> "In the first three decades of the century the public schools were in a parlous state Their low moral tone, their narrow classical curriculum, their poor intellectual results, their roughness and bullying, their bad feeding and housing were no longer likely to be tolerated merely because they were established institutions. The era of the Reform Act knew how to 'mend or end' institutions which were not fulfilling their purpose"

Such schools were ill-fitted to an age which exalted the virtues of hard work, abstinence and thrift The new middle class had drunk deeply at the well of individualism. They were unwilling to perpetuate a system which

* *Secondary Education in the Nineteenth Century*, 1921, p 52



TIME CHART 23: THE PATTERN OF ENGLISH EDUCATION

was barbarous and irrelevant Reform was in the air and public and grammar schools alike were brought under the searchlight of criticism. The first innovations were the work of a handful of men with a middle class outlook—Thomas Arnold at Rugby, Samuel Butler at Shrewsbury, Edward Thring at Uppingham In the sixties, when two Royal Commissions inquired into the condition of public schools and secondary education generally, they still revealed a deplorable educational level. The Clarendon Commission, appointed in 1861, dealt mainly with administration. Its report was guarded The idleness of the pupils was the chief count in their indictment. "We have found no difficulty in ascertaining what is *taught* at these schools; to discover what and how much is *learned* in them is difficult and is only roughly practicable," they said The Taunton Commission, which inquired into the grammar schools, revealed an equal reluctance to move with the times despite the freedom they had gained in 1840, and exposed how large a proportion of the urban population had absolutely no facilities for secondary education.

A hundred towns of five thousand or more inhabitants at that time had no endowed grammar schools The Taunton Commission recognized that this gigantic deficiency could not be made good without the assistance of the State In fact, it proposed the establishment of rate-aided secondary schools, a recommendation which was not accepted. The public and grammar schools remained the preserves of the middle and upper classes; but their number was swelled by the creation of several new "public" schools to meet the needs of the well-to-do business families Such were Cheltenham, founded in 1841, Marlborough, in 1843, Wellington, in 1859, Clifton, in 1862, and Malvern in 1865. The exclusiveness of English secondary education remained, emphasizing and deepening class differences. The products of the English public schools had manners, habits and a code of social behaviour which stamped them as different from the children of the common people who had no such opportunities, no such traditions, and this segregation of children on a class basis has given to English education its distinctive characteristics Though the structure of education was modified in the course of the nineteenth century to meet the needs of a new and influential business class, on the one hand, and of capitalist industry, on the other, it sustained its traditionally mandarin aspect Secondary education remained a preserve for those by birth and family fortune destined to be the future politicians and governors of the country and empire. For the masses it sufficed if they were taught the rudiments of reading, writing and arithmetic in elementary schools.

By the latter half of the nineteenth century, new social needs were demanding a better educated working and lower middle class. The elementary schools were not sufficient to supply the educational demands of industry. Many old fee-paying grammar schools were modernized to provide an expanding demand for black-coated workers. The Department of Science and Art at South Kensington provided evening classes, while the Royal Society of Arts, like the College of Preceptors, established a system of examinations in "technological subjects" At last, in 1902, the State decided to meet the situation By the Balfour Act of that year the new local education authorities, which superseded the school boards in England, were authorized to provide secondary education After the first world war such action was made

obligatory. Secondary schools were required to provide at least 20 per cent "free places." A trickle of children from the working classes thus passes on to the universities, thence into the professions and higher paid posts in industry. The Act of 1944 effected important reforms and enlarged educational opportunity.

THE UNIVERSITIES IN THE NINETEENTH CENTURY

The English universities, as they now exist, are almost exclusively a creation of the present century, having come into existence *as such* to meet the need created by the expansion of education at a lower level, more especially after the Act of 1902. Cambridge and Oxford remained preserves of the Anglican Church till the latter end of the Victorian epoch In 1834 the House of Lords threw out a Bill for the removal of religious tests. Acts of 1854 and 1856, on the recommendation of two commissions appointed in 1850, made degrees at both universities open to Dissenters, but their teachers had still to conform. The last effective religious restrictions were not removed till 1871, when all lay posts at Oxford and Cambridge were thrown open to men of all creeds upon equal terms. The year 1871 also witnessed the appointment of Clerk Maxwell as Professor of Experimental Physics at Cambridge and the beginning of a revival of the Newtonian tradition.

Meanwhile the only fully fledged university on a new model was London, which received its charter in 1836 The teaching nucleus of London University was two rival institutions, one (now University College) founded by friends of Jeremy Bentham as an instrument of a new social culture, and King's College, set up in opposition to the "godless college of Gower Street" as a custodian of traditional values More important than its teaching activities was its function as an examining board, granting *external* degrees to students in the provinces where colleges without university status were dispensing instruction in technology and medicine Colleges of medicine were founded at Sheffield and Birmingham in 1828, at Leeds in 1831, Newcastle in 1852 The last named became part of the newly-created (1832) University of Durham.

In the great industrial towns at the end of the eighteenth century, societies like the Invisible College of the Commonwealth had arisen to promote scientific research with special bearing on technology. Most notable, though short lived, was the Lunar Society of Birmingham, which included such notable industrialists and inventors among its personnel as Boulton, Wedgwood, Watt, Erasmus Darwin, Priestley, Murdock, Southern and Alexander Keir, several of whom were also original fellows of the Royal Society of Edinburgh, formed about the same time Manchester, with Henry, Owen, Watt junior, and later Joule, had its Literary and Philosophical Society. At Norwich, at Newcastle and at Bristol, whence Humphry Davy came to London, there were others. London had its Royal Institution, made famous successively by Rumford, Davy and Faraday during the first half of the nineteenth century. The associations of industrialists, technicians and scientific amateurs in these societies encouraged the provision of endowments for colleges of technology from the business community Owens college at Manchester started in 1851, and in 1884 combined with others

at Liverpool and Leeds in the Victoria University, which is the parent body of what have been since 1904 three independent institutions with university status. In 1880 Huxley gave as the inaugural oration of Sir Josiah Mason's College of Science at Birmingham, his challenging lecture on *Science and Culture*. Mason's College became the University of Birmingham in 1900. The Universities of Sheffield, Bristol and Reading respectively received their charters in 1905, 1909 and 1926 Meanwhile, London continued to hold a watching brief for provincial University Colleges at Nottingham, Exeter, Southampton, Hull and Leicester. The Universities of Cambridge and Oxford did not gain the public esteem they now enjoy till the creation of the provincial universities had galvanized the authorities to make provision for modern studies which remained the preserve of technical colleges throughout the nineteenth century.

When the nineteenth century opened, Scotland had five universities—St Andrews, Glasgow, King's College, Aberdeen; Marischal College, Aberdeen, and Edinburgh, the last named with a high reputation for medical studies. In the fifty years preceding 1827 it had produced 2,792 doctors of medicine, 819 belonged to Scotland, 706 to England, 850 to Ireland, 225 to the British Colonies, and 192 to foreign countries Glasgow too had a famous medical faculty. Aberdeen, the first British university to have a chair of medicine, was no longer in the forefront The *Commission on the Universities of Scotland* (1826) reported that "it is only recently that anything like an adequate medical school has been formed, so that it is only lately that students started medicine here" St Andrews had no medical instruction and no medical students, though the university granted a medical degree without attendance or examination, a practice condemned by the 1826 Commission.

Arts degrees in all the Scottish universities were at that time granted as a matter of form and not withheld from any student willing to pay the fees "The degree has consequently ceased to be an object of ambition in Edinburgh and Glasgow," say the Commissioners, who accordingly offered recommendations with a view to making the degree "truly a matter of distinction and an object of ambition." Unhappily, their proposals had little relevance to new conditions They advocated the revival of the B.A degree as the culmination of a four-year course to consist of Latin, Greek, Mathematics, Natural Philosophy, Logic, and Moral Philosophy. An M A. was to be given after a further year of study devoted to Natural Philosophy, Chemistry, and Political Economy—"a subject now in very great demand." No legislation followed till 1858. The *Universities (Scotland) Act* of that year changed the constitution of the universities by erecting university courts, having full financial control. An executive commission appointed to carry the Act into force issued a shower of ordinances which established *inter alia* a four-year curriculum for the M.A. degree to embrace seven compulsory subjects—Latin, Greek, Mathematics, Natural Philosophy, Logic, Moral Philosophy and English A Commission of 1889 conceded a wider choice of subjects, including modern languages, political economy and history, and established a faculty of natural science with degrees of its own.

Church control over the Scottish universities and education generally was weakening in the early nineteenth century, until finally civil replaced eccle-

siastical control. When the nineteenth century opened, whether the Church had an "indubitable right to examine schools of every description within their bounds" became a matter for debate The Disruption of 1843, when a large body of ministers and congregations left the established church to found the Free Church of Scotland, brought matters to a head By the *Burgh and Parochial Schools Act* of 1861 schoolmasters were no longer compelled to subscribe to the Confession of Faith or to the doctrines of the Church of Scotland. By the *Education Act* of 1872 the superintendence of schools was committed to the popularly elected school boards. The Commission of 1826 had recommended the continuance of the law requiring members of the universities to subscribe to the Confession of Faith, but the Disruption of 1843 shattered the control of the established Church of Scotland on the faculties. Ten years later lay professorships were thrown open to men of all religious denominations. The last vestiges of religious penal legislation were successively removed in 1864, 1871 and 1887

CHAPTER XXII

FREEDOM OF THOUGHT AND FREEDOM OF PERSON

PERUSAL of contemporary political controversy might well prompt the reflection that liberty and freedom furnish an excuse for more restrictions on thought and action than any other epithets in common usage Precise definition of what we mean by freedom or liberty in any controversial context is indeed the only safeguard against two dangers which beset us to-day. One of them is the defence of antiquated economic arrangements against the introduction of social controls to ensure the satisfaction of common human needs. The other is the defence of political methods which deny the right of the individual to express certain beliefs on the pretext that their suppression is a temporary expedient. There is here no need to dwell on the first We have already and sufficiently seen how free trade and free enterprise severally became synonyms for the privilege of an owner and rentier group to prey on their fellow citizens What still calls for comment is a widely current supposition that we can lightly surrender safeguards of civil liberty with the assurance that we shall automatically resume them when certain urgent tasks of social reorganization are accomplished. Too easily we forget with what difficulty we secured them, how recently we did so, and—by the same token—how exiguously we hold them. We accept them as inherent in our civilization, intolerant to the behaviour of contemporary societies which condone practices we ourselves lately have abandoned

It is therefore well to recall that barely three centuries have passed since the majority of educated and responsible people in the Homeland justified or condoned imprisonment, deprivation of political rights, or even death for the performance of acts of worship or the expression of philosophical beliefs contrary to the official creed, that the law employed torture to extract confessions with respect to the exercise of miraculous dispensations before consigning the unfortunate victims of such charges to the gibbet or to the stake, and that people who expressed or were suspected of holding now widely accepted political views, then opposed to those of the governing party in the State, were liable to arrest and incarceration for an indefinite period before public trial Long after the extremities of such intolerance, which survived till the glorious Revolution of 1688 had subsided, British law continued to punish trivial offences against property rights with a savagery out of all proportion to any rational justification of penalties as deterrents to crime No reflective citizen who is acquainted with this unsavoury record will lightly surrender our so newly gained right "to know, to utter and to argue freely according to conscience,"* or lightly accept the credentials of those who advocate the pursuit of ostensibly worthy ends by means inconsistent with the safeguard of this right. For if the end justifies the means, we must be persuaded that the means are themselves consonant with its continued pursuit

* Milton, *Areopagitica.*

Harrington, who ranks with Milton as a pioneer in the struggle for tolerance, declared that "where civil liberty is entire, it includes liberty of conscience," and in truth we cannot conveniently separate an historical discussion of religious freedom from freedom of the individual against the arbitrary exercise of authority in general; but this does not exonerate us from responsibility for defining where the legitimate boundaries of legal interference with individual behaviour lie. The expression, religious freedom, may in fact cover a variety of claims, more especially: the legal right to worship in a particular way, the legal right to give public expression to one's beliefs about nature in general or human relations in particular, and the legal right to educate one's children in certain tenets The recognition of any one of these is compatible with the recognition of their respective limitations. If the prescribed form of worship involves the use of musical instruments in public places or enforced absence from work at inconvenient times, the legal right of the individual to worship in his or her own way may become a nuisance to neighbours; and if the free expression of one's beliefs includes the denial of the same freedom of expression to one's neighbours, there may come a point where drastic measures are necessary to safeguard the preservation of toleration itself.

In a free society one such safeguard is universal secular education, which is the guarantee of freedom from ignorance. It is therefore highly debatable whether the claims of freedom of worship or freedom of opinion justify the legal right of a religious sect to conduct its own schools. The claim to do so is doubly specious, because parenthood is not simply an individual preference. It is *de facto* a social relationship. Indeed, any assertion of parental right to limit the educational opportunities the child has to assimilate the broader tolerance of a society which increasingly provides safeguards of social security—once legally assigned to the parent or left to the Church—is itself a surrender of individual freedom to the dictates of a minority. As often happens in social controversy, the attempt to define clear-cut limits to issues which call for perennial re-examination in the light of new facts may lead us into a quagmire of sophisticated irrelevance, from which we can retrace our footsteps only by keeping a fixed gaze on the lit-up horizon of the historical record, but if we can argue till the cows come home about the frontiers of personal liberty and social licence without much prospect of reaching a final decision, we can assuredly profit from due consideration of arguments which have endorsed suppression of harmless or trivial opinions and actions variously stigmatized by our ancestors as heresy, sorcery, sedition and obscenity

FREEDOM OF WORSHIP

The first civil statute against heresy belongs to the time of Wyclif's movement for church reform. Its date is 1382 It was followed in 1401 by a law which prescribed as the penalty death by burning Foremost among historians of civil liberty, Lecky declares, with pardonable exaggeration, "that the Church of Rome has shed more innocent blood than any other institution that has ever existed among mankind," but he adds with justice:

"While the pre-eminent atrocity of the persecutions of the Church of Rome

is fully admitted, nothing can be more grossly disingenuous or untrue than to represent persecution as her peculiar taint. She persecuted to the full extent of the power of her clergy, and that power was very great. The persecution of which every Protestant Church was guilty was measured by the same rule, but clerical influence in Protestant countries was comparatively weak The Protestant persecutions were never so sanguinary as those of the Catholics, but the principle was affirmed quite as strongly, was acted on quite as constantly and was defended quite as pertinaciously by the clergy . . . On the accession of Elizabeth, and before the Catholics had given any signs of discontent, a law was made prohibiting any religious service other than the Prayer Book. . . . The Presbyterians, through a long succession of reigns, were imprisoned, branded, mutilated, scourged and exposed in the pillory Many Catholics, under false pretences, were tortured and hung. Anabaptists and Arians were burnt alive. . In Scotland during nearly the whole period that the Stuarts were on the throne of England, a persecution rivalling in atrocity almost any on record was directed by the English government at the instigation of the Scotch bishops, and with the approbation of the English Church, against all who repudiated episcopacy. If a conventicle was held in a house, the preacher was liable to be put to death If it was held in the open air, both minister and people incurred the same fate The Presbyterians were hunted like criminals over the mountains. Their ears were torn out from the roots. They were branded with hot irons. Their fingers were wrenched asunder by the thumbkins. The bones of their legs were shattered in the boots. Women were scourged publicly through the streets. . . . In America, the colonists, who were driven from their own land by persecution, not only proscribed the Catholics, but also persecuted the Quakers—the most inoffensive of all sects—with atrocious severity. . Among the Protestants it may, I believe, be safely affirmed, that there was no example of the consistent advocacy or practice of toleration in the sixteenth century that was not virulently and generally denounced by all sections of the clergy, and scarcely any till the middle of the seventeenth century "*

These words are not mere rhetoric Hallam soberly states

"At the end of the sixteenth century the simple proposition that men, for holding or declaring heterodox opinions in religion, should not be burned alive or otherwise put to death, was itself little else than a sort of heterodoxy "

Milton, whose *Areopagitica* is a monument of English documentary prose dedicated to the defence of civil liberty, excluded the right of Catholics to worship, less because they were a political menace to the Commonwealth of the Realm than because the Old Testament prohibited idolatry. The English law which prescribed death at the stake as the penalty for religious heterodoxy was not in fact repealed till 1677 During the reign of Elizabeth, anabaptists and persons who denied the orthodox Trinitarian view suffered the fate it prescribed, and there was one execution—of an Arian—in 1612, during the reign of James I. Catholics who perished during this period were condemned under special penal statutes passed after the Reformation

In an age when Jesuits and Puritans were equally convinced that an eternal future of incandescent torture awaited their ideological opponents, when Protestants affirmed the verbal inspiration of the Old Testament and

* Lecky, *Rise and Influence of Rationalism in Europe*, ii, 42 *seq*

fashioned a social ethic in conformity with the stratagems of the Israelite conquest of the Promised Land, the callous treatment accorded to the heterodox was on all fours with the penalties deemed fit for even trivial offences against property. Such beliefs continued to dominate evangelical Protestantism for two centuries after the death of Milton It is therefore important to remember that the origin and relaxation of restrictions on freedom of worship in Protestant Britain were closely linked to the machine of government, central and local. Heterodox views about church governance were heterodox views about secular administration when the parish was still the unit of local government.

In the two centuries before the English Reformation, dissent against Catholic doctrine had allied itself to peasant revolt against a feudal landlord class within which the Norman Catholic hierarchy held a powerful position. Perhaps because it was an essentially popular movement that Wyclif's teaching inspired, his influence never fully succumbed to persecution. In medieval England relations between Crown and papacy were rarely cordial, and the marital escapades of Henry VIII gave courtiers and ecclesiastics with sympathies leaning towards Lollard doctrines, the opportunity of preparing for a final breach with Rome. The King became head of the Church, and the dissolution of the monasteries destroyed at one blow a large vested interest hostile to the monarch in that capacity. The Church was now a national institution. In short, "all members of the state were *ipso facto* members of the state church" (Black) After the brief reaction which lasted while Mary Tudor was on the throne, the Act of 1559 reinstated Elizabeth in the place held by her father and vested supreme power over the national church in the Crown This finally abolished its allegiance to the papacy. An *Act of Uniformity* prescribed a reformed prayer book in the vernacular as the basis of the only permissible form of worship, while the medieval plan of church government, with its hierarchy of archbishops, bishops, deans and so forth, remained intact, save as concerned the ultimate authority of the Vatican.

An inevitable corollary of the Act of 1559 was a papal bull excommunicating Elizabeth and her subjects An English college, established at Douai in 1568 for training priests, now became a rallying-ground for Catholic intrigue and counter-reformation propaganda. The outcome was to strengthen the demand for penal legislation against English Roman Catholics and its rigorous enforcement Catholic intrigue was inevitably directed as much against the Crown as against the doctrines of the national Church, and the suppression of Catholic worship could therefore be plausibly justified as the suppression of a conspiracy against the state; but political arguments for persecution of dissident factions with no affiliations to Rome were equally easy to concoct. There was the example of the anabaptists who had set up a short-lived communist experiment in Münster, and there were the clamorous Presbyterians across the border.

The Scottish Reformation had a more doctrinal flavour than the English. In 1559 Knox returned from association with Calvin and other reformers on the Continent to lead a movement which swept away both the liturgy of Rome and the episcopalian set-up in favour of an unpretentious form of communal worship, with participation of lay representatives called *elders* in

the government of the Church. Its supreme body was a *General Assembly* of ministers, independent of parliament or monarch. Knox attracted a powerful following, and the Scottish Parliament rallied to the support of the reformed Scottish Church. When Knox found himself publicly engaged in political hostility to a Catholic queen and her court, the counter reformationist intrigues of Mary Queen of Scots were the occasion of a violently irrelevant and ill-timed diatribe against the intervention of women in the affairs of state; and if the sympathies of the English queen ever vacillated in favour of the Puritan faction which advocated extensive revision of Anglican church government and ritual, the *Monstrous Regimen of Women* was well calculated to restore her predilection for the moderate party.

At the start, the English national Church had been comparatively latitudinarian with respect both to ritual and to doctrine. In the latter part of the reign of Elizabeth those who favoured a form of worship less formal than the prayer book liturgy, or a form of government more democratic than the episcopalian, were *de facto* enemies of the State. In 1583 Archbishop Whitgift issued an order requiring all clergy to subscribe without qualification to the ecclesiastical supremacy of the crown, the Book of Common Prayer and the Thirty-Nine Articles of Anglican Church doctrine. Ten years later the *Conventicle Act* introduced the penalties of death or exile for attendance at unauthorized places of worship or persistent refusal to attend those authorized. Among the extremists there were not a few martyrs; but a powerful underground movement could still flourish by openly conforming to the legal obligations of church attendance.

The union of the crowns brought no relief to the Puritans who submitted their demands at the Hampton Court Conference convened by James I in 1604. By temperament a dictator, James was only too glad to quit his seat of divided authority in Edinburgh as a centre of operations against a rival too powerfully entrenched in his native land. From London he directed his campaign against the General Assembly in the spirit of the Stuart formula, "no bishop, no king." With the support of the English bishops, he set about the reintroduction of the episcopal system in Scotland, at first with little opposition. Charles I carried on his policy and reaped its just reward. Meanwhile the Puritan party in England was becoming more vocal. The Stuart kings had engaged in a succession of quarrels with their parliaments. They had estranged the merchants of London and industrialists by grants of monopolies. Thus the conflict between Puritan and Episcopalian coalesced with the conflict between parliament and monarchy; and those who resented the control of economic policy by the crown gave a willing ear to preachers who denounced the status of the king as the head of the Church. Among such were many—the *Independents*—whose demands for democratization of church government and simplification of ritual went far beyond those of the Presbyterians. In the reign of Charles I a special tribunal, the *Star Chamber*, became notorious for the savage persecution of the Puritan party in the state. England was on the verge of revolution, but revolt broke out first in Scotland, where a convention of 1638 drew up for signature by all who would subscribe a *National Covenant* reaffirming the Presbyterian view. The soldiers sent by the Stuart king to put down the Covenanters by force

of arms met a strong opposing force with banners bearing in letters of gold, "*For Christ's Crown and Covenant.*" Five years later Charles was at war with the English Parliament.

Charles paid the price of his own follies and of his father's egotism on a cold February morning in 1649, and if capital punishment is ever justifiable, the spectacle was surely one which reflects credit on the initiative of our forefathers. There followed a period during which Englishmen for the first time enjoyed a wide freedom of worship and opinion Throughout the Commonwealth in which Milton, the protagonist of civil liberty, occupied a high office of state, there were two contending parties. The Presbyterians were as fanatical as their persecutors, while the Independents, supported by Cromwell himself, advocated a broad toleration short only of freedom to restore the *ancien régime* of "popery or prelacy," as embodied in an Act passed by the English Parliament in 1653 Cromwell went farther. He restored to the Jews a legal footing in England, permitted them to celebrate their worship and protected their persons from injury English Jewry has thus no Ghetto background as in Germany or Poland, where Jews have been victims of persecution till our own time. They had disabilities, but disabilities shared by other Nonconformists, perhaps less than those of Quakers and of Unitarians. If not prepared to bow in the house of Rimmon, they could not sit as Members of Parliament, while the oath required of members was "on the true faith of a Christian"; and Baron de Rothschild was unable to take his seat when elected for the City of London in 1847. The phrase was deleted from the oath in 1866, two years before Disraeli took office as Prime Minister. Judaism now enjoys the same freedom of worship as other religious beliefs, and it is gratifying to record that British law takes no cognizance of Jewry as a *race* apart.

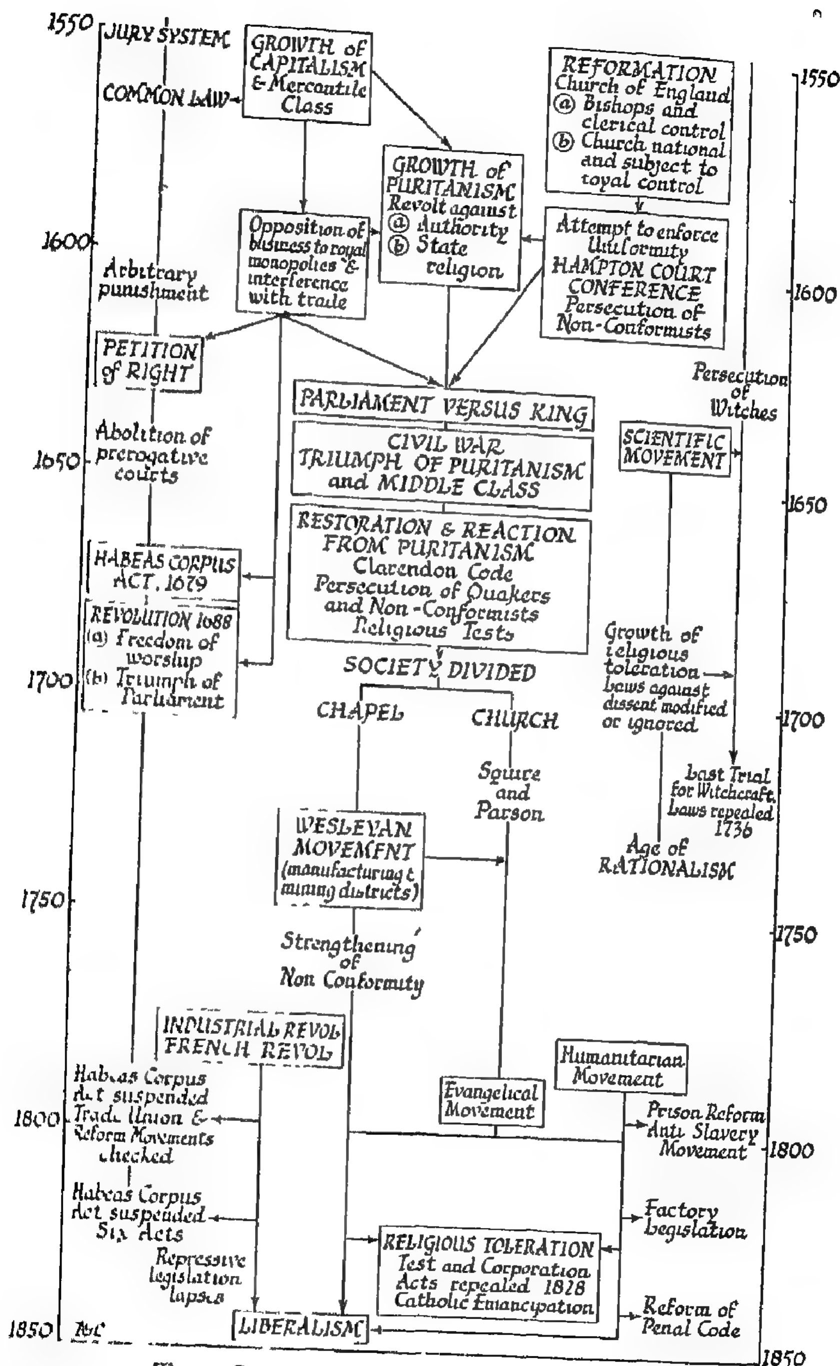
The military government of Cromwell placed on the country a heavy burden of taxation which eventually estranged its more worldly-minded supporters, already weary of the obtrusive piety which Puritan supremacy had fostered. With the Restoration of 1660 started a new phase of repressive legislation, commonly called the Clarendon Code. Though ostensibly concerned with re-establishing uniformity of worship within an episcopalian framework of church government, it served an immediate political end, in so far as it subjected religious sects with republican leanings to severe penalties. Indeed, the Code divided the Homeland into two parties, Church and Chapel The *Corporation Act* (1661) imposed the "sacramental test according to the rites of the Church of England" on all officers and members of municipal corporations, its object being to purge municipal government of disaffected persons, "it being too well known . . . that many evil spirits are still working." The *Act of Uniformity* (1662) made the Anglican Prayer Book compulsory and required acceptance of Anglican doctrines and ceremonies from all clergy and teachers in schools and universities. The *Conventicle Act* (1664), strengthened by a second of its kind (1670), imposed severe penalties for attendance at worship not according to Anglican rites The *Five Mile Act* (1665) forbade any dissenting minister to come within five miles of a corporate town or place where he had previously preached; and a special Act of 1662 dealt with the Quakers, politically the most

dangerous sect, as those in power then thought Transportation was the penalty for a third conviction of attendance. In 1662, 1,300 Quakers were in prison and in March 1685 about 1,460

Meanwhile the Scots Parliament restored episcopal government by an Act of 1662 Ministers who refused to conform were forced to give up their livings By an Act of 1663, more severe than the English *Five Mile Act*, they were forbidden to live within twenty miles of their old parish, within six miles of any cathedral, church, or within three miles of any royal burgh When thousands of people refused to "hear the curates" who filled the vacated pulpits and took to the hills to worship in conventicles with their former Presbyterian ministers, a *Conventicle Act* of 1670 was designed to suppress these gatherings altogether. The authorities did everything in their power to break them up and to force people to abjure their Presbyterian faith, but with little result. At one time resistance took the form of open revolt and clashes of arms took place. At another it compelled a more lenient attitude on the part of the Government, but persecution was severe. Indeed, transportation to slavery in America was a common punishment, and many suffered the extreme penalty of death. "The killing time" was long remembered

Several circumstances conspired to promote a less repressive policy as the Stuart era came to its close In 1669 the report of a parliamentary committee on the decay of commerce had advised "some ease and relaxation in ecclesiastical matters" as a "means of improving the trade of this kingdom" For political reasons, Charles II had sympathy with the Catholics at home or in exile, and prudence dictated that any overt act of favour to them would be disastrous In 1672 he therefore exercised his royal prerogative in a *Declaration of Indulgence* to ease the penalties applicable alike to dissenters and to papists Alarmed at a possible recrudescence of Catholicism, Parliament demanded its cancellation as the price of granting supplies to the Crown It then proceeded to add new disabilities for Nonconformists by passing the *Test Act* of 1673. This excluded from public office, civil or military, anyone who refused to take communion according to Anglican usage or the oath of supremacy and allegiance to the Crown as the head of Church and State alike. Its repeal did not come till 1828 Thereafter, till 1868, when its provisions were completely abolished, public officials had merely to make a declaration "to the effect that they would not use their offices to injure or weaken the Church of England" (Maitland)

The accession of a Catholic king precipitated a new crisis. Irritated by laws which oppressed his co-religionists, James II determined to proclaim toleration, on his own initiative, by the issue of a new *Declaration of Indulgence* Anglican priests who had exalted the supremacy of the Crown into a doctrine of *passive obedience* while the monarch was at least nominally a Protestant, now refused to read the Declaration from their pulpits when called on to do so, and Protestant politicians of both parties—Whig and Tory—united to force the abdication of the king in favour of William of Orange and his wife Mary. The revolution which secured a Protestant succession in 1688 was followed by an *Act of Toleration*, which lightened the disabilities of Nonconformists, other than Papists and Unitarians, in the same year. Its provisions were

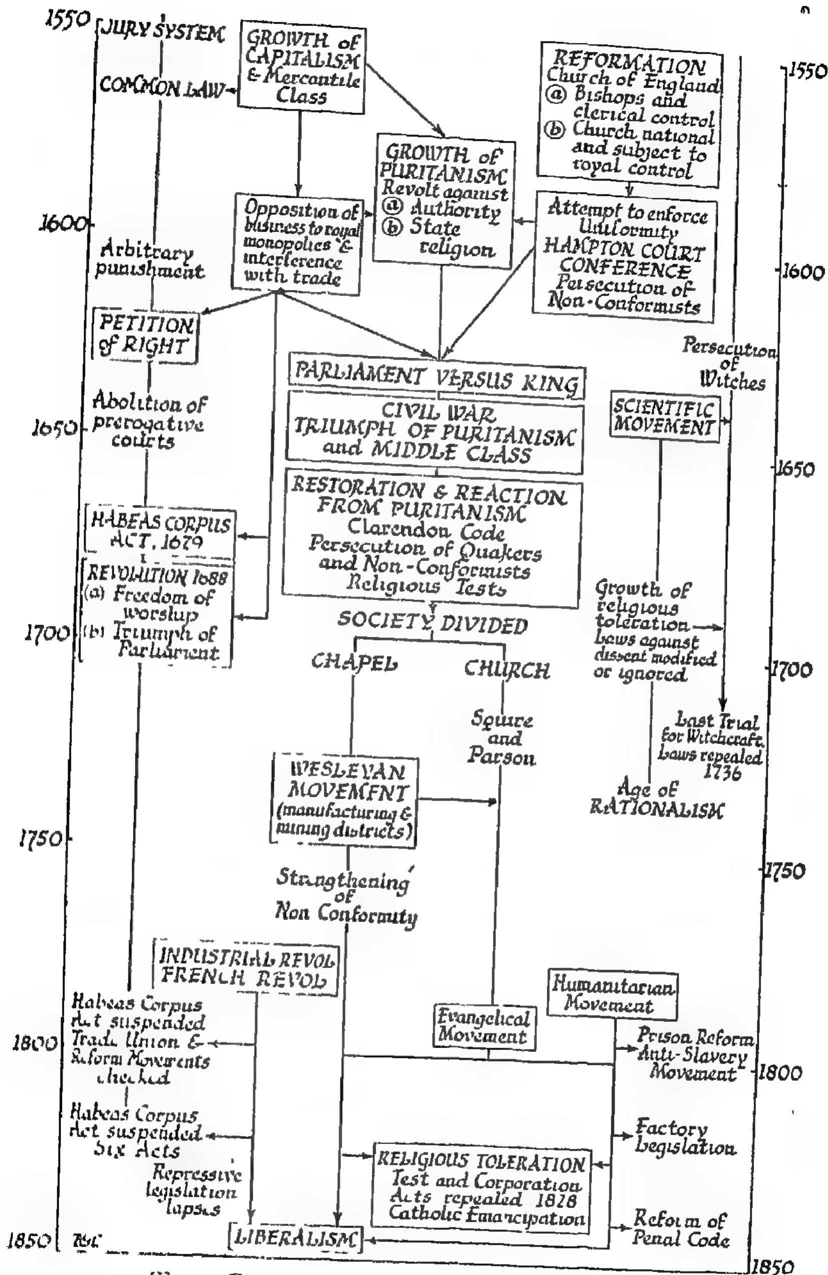


TIME CHART 24: THE MARCH OF FREEDOM

intricate. The main effect was to remove penalties against attendance at a regular place of worship and to license the right to preach therein on signature of a declaration of Protestant orthodoxy defined by reference to the Thirty-Nine Articles of the Church of England, excluding such as concern the administration of the sacraments and ordination of priests. The rebellion of 1715 was followed by a minor reaction An *Occasional Conformity Act* (1711) aimed at enforcing regularity among those *not* registered as dissenters, and there was a *Schism Act* of 1714, repealed four years later From 1728 a remarkable practice which occurred annually took cognizance of the growing social influence of dissenting bodies This was the passage of *Acts of Indemnity* to exculpate incumbents of public office if they had failed to subscribe to the provisions of the Test Act of 1673

Within this framework of limited toleration and indulgent hypocrisy, the Dissenters now enjoyed freedom to found schools and training colleges Notable among such was Warrington Academy, where Priestley taught before he came to Birmingham. One result of the spate of intolerance traversed in the preceding pages was therefore to nurse the ingrained British belief that minorities, whether Quakers, Methodists, or the Catholics, whose exclusion from full civic rights was cancelled by the *Catholic Emancipation Act* of 1829, are entitled to conduct their own schools in opposition to, or in competition with, those of the State. Nowhere else has religious sectarianism such a vogue, and nowhere else do religious factions advance such impudent claims to levy tribute from the community as a whole for the propagation of private beliefs. A second result of the persecution of Dissent was that it deprived the Anglican Church of the crusading vigour of the age of Reformation, and reduced it to an effete bureaucracy of which the officials held their pulpits in virtue of a system of patronage on all fours with the prevailing corruption of the political scene This sequel of repression, rather than the comparative freedom enjoyed by Dissenters during the latter half of the eighteenth century in towns such as Birmingham and Leeds, was responsible for the magnitude of dissent in the succeeding one, when the main body of Nonconformity was the by-product of a new movement for reform within the Church itself.

In 1738 John Wesley, an unbeneficed clergyman, returned from Georgia and began to preach where and when he could find an audience The Wesleys and their friend George Whitefield were not Dissenters. They sought nothing more than the regeneration of their own Church Crowds of simple folk, estranged by the worldliness and cynicism of the beneficed clergy and not as yet politically articulate in their own material interests, flocked to hear them in the market-place, in the mining villages and in the countryside. Thus came into being the *Society of the People called Methodists*, from which the several Methodist Churches took their origin by almost imperceptible stages. It was, and is, irregular for an Anglican priest to preach outside his parish without consent; but if consent was not forthcoming the leaders of the Methodist Revival acted in accordance with the dictates of a consuming zeal Wealthy laymen endowed mission halls to supply the lack of church pews to seat the multitudes infected with it, and lay preachers with no episcopal credentials discharged in these chapels a role for which there was an in-



TIME CHART 24: THE MARCH OF FREEDOM

intricate. The main effect was to remove penalties against attendance at a regular place of worship and to license the right to preach therein on signature of a declaration of Protestant orthodoxy defined by reference to the Thirty-Nine Articles of the Church of England, excluding such as concern the administration of the sacraments and ordination of priests. The rebellion of 1715 was followed by a minor reaction. An *Occasional Conformity Act* (1711) aimed at enforcing regularity among those *not* registered as dissenters, and there was a *Schism Act* of 1714, repealed four years later. From 1728 a remarkable practice which occurred annually took cognizance of the growing social influence of dissenting bodies. This was the passage of *Acts of Indemnity* to exculpate incumbents of public office if they had failed to subscribe to the provisions of the Test Act of 1673.

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sufficiency of ordained ministers. Where the official clergy were sympathetic, sympathizers of Wesley and Whitefield retained church membership as an Evangelical party—the *Clapham Sect*—within the pale. Meanwhile the extramural organization soon grew too large for assimilation and of too independent a temper to accommodate compromise on legal technicalities which had little to do with doctrine or traditional controversies over church government.

There are some who will take exception to the designation of Wesley as a reformer. They will contrast his belief in the verbal inspiration of the scriptures and the Satanic powers of sorcerers with the sceptical worldliness of the bishops and the reflective tolerance of Dissenters in the Priestley tradition. They will say, and rightly so, that Wesley's appeal to the common people, to whom the state as yet guaranteed no safeguard of freedom from ignorance through the medium of public secular education, was due as much to the fact that he shared their superstitions as to the fact that he interpreted their worldly aspirations. It is also true that the English Church was by law established for certain ostensible ends, and that it had ceased to make any pretence to pursue them while citizens who still deemed such ends to be worthy had to bear the costs of maintaining a corrupt ministry with no aspirations to a spiritual leadership consonant with its social privileges. When we here speak of Wesley as a great leader of Church reform, we do so with cognizance of this situation, meaning that Wesley made a last desperate effort to make the Church of England a social institution rightly or wrongly faithful to its claims to a privileged position in English social life.

The Evangelical movement within, and finally without, the Church had no affiliations with the Puritan tradition. Its peculiar political influence in the field of prison reform and the struggle for the emancipation of the slaves in the Colonies had its origin in an ideology sponsored by the high church party during the Stuart regime. Before the Commonwealth, English Puritans were at one with Presbyterians in affirming the doctrine of predestination to which Luther and Calvin equally subscribed. Since the belief that the heathen populations of Africa or Asia were elected before the beginning of the world to everlasting fire was equally propitious to the slave traffic and discouraging to missionary enterprise at home or abroad, the temper of Puritanism was never favourable either to toleration or to active propaganda on behalf of the salvation of others. The earliest Protestant theologian who vigorously attacked the predestinarian view was Arminius. In Holland the doctrine that free grace is available for all mankind received little official approval, but the English Church party which was anti-Calvin and anti-Knox gave it their support. Wesley, a fellow of Lincoln College before his ministry in America, was indeed in the Oxford high church tradition, of which the Methodist Revival of the eighteenth, and the neo-Catholic Tractarian Movement of the nineteenth century were both offspring.

Thus the great expansion of dissent characteristic of the end of the eighteenth century was by no means the outcome of excessive toleration. The greater toleration religious dissent enjoyed in the eighteenth century was in part the sequel of a decay of morale in the Church from loss of its most

zealous personalities This decay had gone so far that the Church could not accomplish its own regeneration and expelled its reformers with results on a scale exceeding those of previous disaffection When a social institution muzzles criticism and penalizes excessive zeal it institutes a mechanism of personnel selection which may result in driving out of its ranks those who can contribute most to its stability or social worth. It also institutes a mechanism of personnel selection which endows with excessive power men or women with the inclination to abuse power over their neighbours.

WITCHCRAFT

For a century and a half after the final break with Rome the preservation of freedom from Papal authority provided a perennial excuse for the repression of opinions diametrically opposed to those of the Roman Church, often with ruthless brutality and at best by legal restrictions which handicapped educational progress in the Homeland for many generations. The contemplation of this record should give us pause when the need for strong central authority is advanced to justify the suppression of political minorities in our midst It is also fitting to recall how often our forefathers have invoked the law to suppress modes of conduct now deemed to be innocuous in the passionate conviction that tolerance would lead to disastrous consequences The history of witchcraft is an eloquent example of cruelty condoned by people whose chief fault was such failure to recognize the possibility that they might be mistaken (Fig. 114).

Modern research on the origins of the legal code with respect to witchcraft seems to show that there existed widespread survivals of pre-christian tribal ritual in medieval Europe, partly assimilated by the eclectic temper of early Catholicism, sometimes connived at by the local clergy but increasingly distasteful to their ecclesiastical superiors As the Church extended its domain this stratum of indigenous paganism became an underground movement with local cells As criticism of corruption and innovation became more vocal within the Church, alarm grew at the centre of authority, and Rome decided to stamp out competition and critics, the one as sorcery, the other as heresy. Such was the twofold assignment of a special tribunal, the Holy Inquisition, established by Pope Innocent III in 1208. One writer has estimated that it consigned in all 31,000 persons of both sexes to the flames in Spain, where its main operations were directed against Jews, initially against Jews who had relapsed into the practice of their own worship

Elsewhere on the Continent of Europe the suppression of secret pre-Christian cults occupied much of the attention of the Inquisition According to Lecky, four hundred witches went to the stake on one and the same day in the city of Toulouse alone How many of them were in fact practitioners of pagan rites, how many of them were harmless alike to the Church or the neighbours, we cannot tell. In an age when the wisest of men and women credited the miracles of the prophets, apostles and saints of the Church without demur, the secrecy which enshrouded the witch-cult encouraged its ecclesiastical tormentors to endow its votaries with supernatural exploits which had often little to do with their clandestine cele-

brations. It is certain that many victims of witchcraft trials, accused of such fictitious exploits, were merely victims of circumstances in no way connected with the practice of a pagan ritual.

A comparable mania which disfigures the annals of the Homeland takes its origin from the fanaticism of the Reformers themselves To be sure there were laws against sorcery before Bishop Jewel demanded that Elizabeth should put into "due execution" the prescribed penalties for "such malefactors"; but in Catholic Britain their operation had been half-hearted Encouraged by the bigotry of Elizabeth's successor, witch-hunting increased till the beginning of the Commonwealth. Indeed, over two hundred executions for witchcraft took place south of the Border during the three years 1645–7. Thereafter convictions declined. There were three executions in 1682, and the repeal of the law came in 1736 In New England no less than twenty persons were hanged on the same pretext in 1692, but the excesses of the English Reformation and of American Puritanism fade into insignificance when we turn our attention to Scotland, where there was no law against witchcraft till 1563 In 1603 the College of Aberdeen enjoined every minister to question all practitioners upon oath with respect to their knowledge of witches There were boxes in the churches to receive accusations The Presbyterian clergy and elders directed the tortures by which confession of impossible happenings was inevitably extracted from the accused "When we read of these tortures," says Lecky,

"which were worthy of an oriental imagination, when we remember that they were inflicted for the most part on old and feeble and half-doting women, it is difficult to repress a feeling of the deepest abhorrence for those men who caused and who encouraged them. If the witch was obdurate, the first, and it was said the most effectual, method of obtaining confession was by what was termed 'waking her.' An iron bridle or hoop was bound across her face with four prongs which were thrust in her mouth. It was fastened behind to the wall by a chain in such a manner that the victim was unable to lie down; and in this position she was sometimes kept for several days, while men were constantly with her to prevent her from closing her eyes for a moment in sleep. Partly in order to effect this object, and partly to discover an insensible mark which was the sure sign of a witch, long pins were thrust into her body . . . Other and worse tortures were in reserve. The three principal that were habitually applied were the pennywinkis, the boots and the caschielawis. The first was a kind of thumbscrew, the second was a frame in which the leg was inserted and in which it was broken by wedges, driven in by a hammer, the third was also an iron frame for the leg which was from time to time heated over a brazier "

It would be possible to fill pages with documentary testimony to these nauseating practices instigated and supervised by a Christian ministry. Lecky continues:

"How many victims perished by these means it is now impossible to say. A vast number of depositions and confessions are preserved . . We know that in 1662 more than 150 persons were accused. . . One traveller casually notices having seen nine women burning together at Leith in 1664. . . . In

1678 nine others were condemned in a single day . In most Catholic countries, it was a grievance of the clergy that the civil power refused to execute those who only employed their power in curing disease. In Scotland such persons were unscrupulously put to death. It is generally said that the last execution was in 1722, but Captain Burt, who visited the country in 1730, speaks of a woman who was burnt as late as 1727. . . As late as 1773 the divines of the Associated Presbytery passed a resolution declaring their belief in witchcraft and deploring the scepticism that was general "

Indeed, the growth of scepticism and the spread of rationalism, associated as it was with the progress of science, was the death-blow of this last exercise of ecclesiastical authority over human life. In the reign of Elizabeth, Reginald Scot was alone among his contemporaries when he states that the issue,

"is not whether there be witches or nay, but whether they can do such marvellous works as are imputed to them Good Master Dean, is it possible for a man to break his fast with you at Rochester, and to dine that day at Durham with Master Doctor Matthew, or can your enemy maim you, when the Ocean Sea is betwixt you? May a spiritual body become temporal at his pleasure? Or may a carnal body become invisible?"

By the middle of the seventeenth century these views were commonplace A more powerful *Invisible College* (p 519) was in session, working in its own way wonders, openly exhibited by its members, for the advancement of trade in the realm. Though not anti-religious, it was bold to affirm that the age of other miracles had passed away, and to dismiss as harmless impostors and quacks all who declined to submit to the arbitrament of public experiment their claims to control natural phenomena The official recognition of its activities and usefulness in 1662 by the grant of a charter, when it became the Royal Society, signalizes the final discredit of the body of beliefs which sustained the pitiless practices we have here discussed

THE PENAL CODE

Even more than the tale of political persecutions, or that of the struggle for religious freedom, the history of witch trials forces on our attention a peculiar conceit from which mankind is beginning, very recently and very locally, to outgrow. Long after the extraction of bogus confessions by torture had fallen into discredit, majority opinion favoured the belief that the most effective method of ensuring conformity to the law of the land is provision of penalties of extreme ferocity for its infringement When we contrast Wesley's mysticism with the enlightened scepticism of his broad church opponents, it is fitting to remember that the Bishops' bench in the House of Lords fought consistently to frustrate the efforts of those who strove to remedy this great error, while Methodists and members of the Clapham Sect were in the forefront of criminal law reform.

Before the issue stated in the preceding paragraph became articulate, another which concerns freedom of personal restraint from arbitrary exercise of authority had been the focus of perennial agitation. Freedom in this sense

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signifies the existence of safeguards against arrest and incarceration without immediate trial to provide the accused with occasion to establish his or her innocence of law-breaking, and incidentally the opportunity of understanding what obligations the law imposes on the citizen. The last qualification has a history of its own. Till the time of Edward III, the English courts conducted their business in Norman French, and Norman French remained the medium for transcription of Acts of the English Parliament till the Commonwealth. It temporarily regained its status during the Restoration of the seventeenth century. Only after the Revolution of 1688 was the original text of the obligations and rights of a citizen accessible in a language with which the citizen was familiar.

In Norman England, law dispensed by courts over which the lord of the manor or his bailiff presided was local, and it was common to incorporate a panel of tenants to declare manorial custom. Some such customs had a wide currency, and a code of *common law*, as opposed to Statute Law subsequently established by Act of Parliament, took shape therefrom before there was a central authority invested with the exclusive power of law making Side by side with the local tribunals of the manor there were royal courts which administered justice in accordance with this code, and increasingly encroached on the province of the manorial courts as the power of the Crown extended in other directions. Associated with the procedure of these courts was the emergence of a safeguard against the use of torture to extract confessions. This was the presentation of sworn evidence by a panel of witnesses with first-hand knowledge of the disputed issue. Out of it grew the jury system, which assumed its present character in the fifteenth century

The rival claims of king and barons to legal jurisdiction was itself the occasion of a noteworthy compromise embodied in the Magna Carta, signed in 1215 at Runnymede near Windsor on the banks of the Thames It conceded the kingly power to levy taxes, but asserted the existence of law which the Crown itself must respect "No freeman," states Clause 38 of the Charter, "shall be taken or imprisoned or disseised or exiled or in any way destroyed, nor will we go upon him except by the lawful judgment of his peers or (and) the law of the land." Clause 40 states further. "to no one will we sell, to no one will we deny or *delay* right or justice" Hence originated a new view. If a man was imprisoned without trial, his friends could demand that the sheriff should produce the prisoner in court and give reason why he was held in custody Such was the origin of the famous writ of *Habeas Corpus*, always regarded as a bulwark of English liberty and one most jealously cherished and defended at all times.

Trial by jury and even the privileges of Magna Carta were not firmly recognized by the end of the middle ages Time and again men went to prison without trial; and packed juries were intimidated to procure the miscarriage of justice. During the enclosure movement of the sixteenth century the poor found more justice in the prerogative courts of the crown than in the common law courts, where the great man could exercise the machinery of law in his own interest; but the struggle to control kingly power in the seventeenth, as in the thirteenth, century consolidated the safety of the citizen in the long run. A landmark in this struggle is the attempt of Charles I,

when at his wits' end for money, to raise a forced loan. Many refused to subscribe Five men, arrested for refusal, were imprisoned without trial When they applied for a writ of *habeas corpus*, the judges held that the king could imprison without limit, and that there could be no redress at law This case aroused great indignation Following elections, a new Parliament debated the subject and the upshot was the *Petition of Right* (1628), which recited the ancient liberties of the subject, thus grossly infringed, and the statutes, thus wilfully broken by the king. It then proceeded to demand: (1) that no man thereafter be compelled to make or yield any gift, or loan, benevolence, tax, or such like charge, without common consent by Act of Parliament; (2) that no freeman be imprisoned or detained without cause shown; (3) that soldiers and mariners should not be billeted upon private individuals without compensation; and (4) that no commissions for proceeding by martial law should be issued in future. At first the king maintained that the Petition did not infringe his prerogative, but the bad grace with which he accepted it shows how clearly he realized that it was more than a mere statement of ancient custom

Some fifty years later the principle at issue was incorporated in the Habeas Corpus Act of 1679. It was enacted that the courts of law could order anyone who had been wrongfully imprisoned or otherwise detained to be brought before them for examination Though on many occasions, as in times of war or civil disturbance, the Act has been suspended, it did ensure that none could be imprisoned without trial in defiance of the courts There were suspensions in 1689, 1696 and 1708 and at subsequent dates, notably during the industrial revolution when the ruling powers were in constant dread of the effects of the French Revolution and of the growing movement for political reform. In the eyes of the Government the latter was a product of the former, and as such it had to be checked at all costs. In 1795 a charge of high treason was instituted against Thomas Hardy, founder of the *Corresponding Society*, and leading light in the reform movement then arousing enthusiasm among the working classes. The reputation of English justice was saved by the jury system, when the twelve men good and true refused to convict. So Hardy, and several others under a similar charge, were acquitted amidst wild enthusiasm of the populace. The government then tried other measures to suppress free expression of political heterodoxy. An Act of 1799 suppressed corresponding societies and the Habeas Corpus Act was again suspended. When demand for political reform was once more vocal at the end of the Napoleonic War, a Tory government took drastic action Rioters were tried for high treason. Authors and printers of so-called seditious pamphlets were indicted. Again, juries were locally recalcitrant, and again, in 1819, the Habeas Corpus Act was suspended

Contemporaneously began an agitation to weed out statutes no longer consonant with public opinion or with the moral sentiments of the age. Methodists and Quakers joined forces with free thinkers in a campaign for the revision of penalties for law-breaking At the end of the eighteenth century the criminal code was "a sanguinary chaos" with two hundred crimes punishable by death The absence of an effective police system made Parliament rush through a succession of new Acts for the protection of property, and it

was said that a landlord who could get nothing else from parliament could at least be certain of the grant of a new capital felony. Indeed, it has also been said that in no other country were so many capital offences on the statute book Despite this, not more than one-sixth of those capitally convicted were sentenced to death Juries hesitated to convict with knowledge of the dire consequences to prisoners who might merely have committed a trivial offence, when there were laws imposing the death penalty for "privately stealing in a shop, warehouse, coach-house or stable to the amount of 5s.", "stealing to the amount of 40s in a dwellinghouse," and "stealing to the amount of 40s. on board vessels in navigable rivers " That the criminal code was not in keeping with the temper of the age is shown by a steadily decreasing ratio of executions to convictions for capital offences. The following figures, taken from a *Life of Sir Samuel Romilly*, who was the protagonist of penal reform, refer to London and Middlesex alone.

Year	*No of Convictions for Capital Offences*	*Persons Executed*
1749	61	44
1749–56	428	306
1764–72	457	233
1802	97	10
1806	60	13
1808	87	3

In 1810 Romilly opened an attack on the death penalty in the House of Commons by seeking leave to bring in Bills abrogating it in the cases mentioned above Backed by the legal profession, the government opposed reform and all three Bills were thrown out either in the Commons or in the Lords, where the Archbishop of Canterbury, the Bishop of London and five other bishops sided with the opposition. In 1813 Romilly tried again, only to meet the same fate. This time two royal princes, an Irish archbishop and four bishops were with the opposition.

Another target for Romilly's reforming zeal was transportation. Since the reign of Charles II, transportation had taken the place of exile as a penalty, and the practice of reprieving felons by shipping them to America, where they were indentured as servants for a period of seven years, had provided colonists with a supply of cheap labour. When shipment to America became difficult because of war, the home government established hulks or prison ships to take the place of transportation The nauseating conditions on these ships were revealed by John Howard, the prison reformer On one of them no less than 176 out of 632 prisoners died between 1776 and 1778. In 1787 the Government decided to send convicts to New South Wales and the first batch of 264 set sail in February of that year Thereafter there was a steady stream The ships were under private ownership and profit was the main object. Naturally, therefore, conditions on the voyage were appalling. Romilly first raised the matter in the House of Commons in 1810, when he exposed some of the horrors of transportation. Later, others took up the cudgels on behalf of the wretched deportees. In 1832 a committee of the House of Commons, still wishing to retain transportation, made suggestions

for improvement Five years later another committee recommended its abolition, but there were still many who argued that there was no practicable alternative. Prison accommodation was expensive and the number of prisoners was necessarily greater after the abolition of capital punishments for minor crimes. Transportation was not finally abandoned until 1857.

Despite John Howard's disclosures, English prisons remained a reproach to civilization. In 1814 Newgate had been declared a public nuisance by the grand jury of Middlesex, and a parliamentary committee was at that time inquiring into the prisons of the city of London. In his speech to the Commons on June 5, 1810, Romilly declared, "The prisons of this country remain a reproach to it No step has been taken to adopt a plan by which the different classes and species of offenders might be separated from each other. . . . The Prison of Newgate particularly seems to combine every defect of which a place of confinement is capable Whilst a national monument has been erected to the memory of Mr. Howard, . . . the City of London leaves close to the statue . a monument of its own disgrace and inhumanity" Romilly was not alone among those who fought in Parliament for better conditions Burdett helped him and he had a large following in the country, among whom Elizabeth Fry, a great and noble Quaker, carried on the work of John Howard in visiting prisons and trying to reform prisoners by means of religious instruction. "This evangelical interest," says Woodward, "was, however, of great importance in giving publicity to the scandals shut away behind prison walls"

The first effective step towards prison reform was taken by Peel Justices of the Peace were ordered to organize their prisons on a prescribed plan, regular inspections were to be made and reports sent to the Home Office Jailers were to be paid wages and forfeited the right to collect fees Women warders were to have charge of women prisoners and all prisoners were to be graded for work. Prison chaplains and surgeons were to make regular visits, and there was to be instruction in religion, and reading and writing were prescribed Peel's reforms were of limited scope, applying only to county prisons, to London and to seventeen provincial towns Elsewhere prisons of all kinds, as well as special *debtors'* prisons in London, remained as before A committee of 1835 recommended more central control and greater uniformity The treadmill was substituted for "productive work," a step but little removed from torture. For a generation nothing further was done Woodward sums up the temper of the Victorian Age when he writes, "the sum of human pain inflicted unintentionally, and as a result of invincible ignorance, by the prison system in the nineteenth century is likely to astonish posterity far more than it worried contemporaries."

Other methods of punishment remained as relics of an earlier age The lash, for instance, was used very generally in the armed forces, where one thousand strokes in instalments was not an exceptional sentence. In a speech on April 15, 1812, Romilly thus describes the agony inflicted by this barbarous system.

"The Great Commentator on the Laws of England has said that the rack and the knout are unknown amongst us—that death, simple death, unattended

with any circumstances of torture, is the severest infliction which the Constitution allows!—And yet we tolerate this species of punishment—this refinement of cruelty;—we permit a fellow creature to be driven to the very verge of existence, a Surgeon standing by to feel the pulse of the sufferer, and to pronounce at what moment exhausted nature can bear no additional infliction. Then, when his soul is about to forsake his tortured body, and to leap into eternity—then, indeed, the poor wretch is taken down from the halberts and removed into an hospital, where he is left, his body more at ease, but his mind still upon the rack, reflecting, that the faster his wounds heal, the nearer he is to the renewal of his sufferings, and that his life is thus cherished by his tormenters, only that it may be again subjected to their torments"

Another barbarous custom was the use of the pillory Romilly supported a Bill introduced in 1815 to abrogate this form of punishment; but it was thrown out by the Lords after it had passed the Commons. In the following year, however, the pillory was abolished for offences other than forgery and kindred crimes The last culprit to be pilloried was Peter James Bossy. That was in 1830. Despite the heroic efforts of Romilly, little practical result had been achieved when he took his own life in 1818. His notable accomplishment during his lifetime was abolition of the death penalty for pick-pockets (1808), for thefts from bleaching-grounds (1811), and for convictions of soldiers and sailors charged with begging without a pass (1812) Another achievement was the repeal in 1817 of an Act passed in the previous year, which made a poacher apprehended at night, even though unarmed, liable to be transported for seven years

The impulse to reform was reinforced by Bentham's constant query, *what is the use of it?* Through the efforts of Sir James MacKintosh, a committee, appointed to report on all capital offences in the penal code, recommended repeal of a large number of obsolete statutes which authorized the death penalty. Until 1823, when Peel took up the agitation, the House of Lords stood in the way Thereafter progress was rapid. Five statutes were passed, abolishing the death penalty in about a hundred cases. In 1832 house-breaking, house-stealing, sheep-stealing and the coining of false money ceased to be capital offences For certain cases of forgery, however, the Lords still insisted on retaining the death penalty. Further progress was made in 1837 and 1841, when a proposal to limit the death sentence to murder was lost by one vote. Since 1838 no person has been hanged except for murder or (up to 1861) for attempted murder, or for treason. In 1860 and 1883, when the criminal code was consolidated, many obsolete laws were repealed.

FREEDOM OF EXPRESSION

A community is capable of accomplishing social adjustments by reasonable persuasion only if it safeguards both freedom of individual criticism of the government, and freedom to put forward proposals for innovations with respect to social policy, organization, law and individual behaviour. Such freedom does not necessarily presuppose the right to express any views whatever. For instance, it is arguable that a society resolute in its deter-

mination to progress in an orderly way would set limits to the right of individuals to advocate recourse to violence when unable to achieve their ends by persuasion, and to promote active hostility towards minorities, for instance the Jewish community Had the Weimar Republic recognized the reasonableness of such restriction and acted accordingly, it might have averted a headlong retreat from reason culminating in the most devastating war of all time.

While it is easy to define the limits of expression as a necessary safeguard of progressive social adjustment by persuasion and education, it is not easy to give it legal validity, because those who administer the law are only too human. In practice, communal alertness to arbitrary suppression of opinion by law is the main safeguard of what freedom of expression we enjoy Two features of our own legal system emphasize the truth of the oft-quoted aphorism that the price of liberty is eternal vigilance One is that legislative restrictions on the behaviour of the individual, as for instance with respect to Sunday trading, remain unrepealed on the Statute Book long after enlightened administration has ceased to invoke their use. The other is that some of the reputed rights of the individual are circumscribed by common (p. 554), as opposed to statute, law, and their definition thus resides in the wisdom of the bench. That judges and magistrates are indeed superhumanly immune to the prejudices of their forbears or contemporaries is a polite fiction, the falsity of which is continually exposed by events, and amply by events within living memory. Neither the fact that an intricate web of unrepealed legislative restrictions limits the right of freely expressing beliefs severally designated *sedition*, *blasphemy* and *obscenity*, nor the lack of clear-cut statutory safeguards prescribing what sort of beliefs a citizen can freely express, and in what circumstances, excites widespread attention when the temper of the time is illiberal, but recent history of the Homeland repeatedly proclaims the abuses which arise from both circumstances when a repressive government is in power. We need not retrace our steps to the notorious Judge Jeffrey to find examples

Sedition is a common law offence not explicitly delimited by statute, though many statutes deal with seditious actions Its various judicial interpretations include both restrictions which are inconsistent with the promotion of social innovation by rational persuasion and restrictions which are in fact a necessary safeguard of the full exercise of freedom to do so. But it is equally true that an illiberal administration may invoke the one exclusively to suppress expression of opinions critical of its conduct or credentials, and refrain from invoking the other against flagrant acts of incitement to violence directed against its own critics and opponents, though such latter acts are equally seditious since they provoke ill-will and hostility prejudicial to public order between different classes of the king's subjects. Thus the government which provided elaborate police protection for the great demonstrations of Mosley's Blackshirts in 1934–6 did not prosecute British Fascists for inciting race warfare in the East End of London, where a magistrate (1939) at Hackney contemptuously dismissed a summons under the Public Order Act, properly issued by a reserve army captain against a Fascist speaker Indeed, police charged with batons in Thurloe Square, South Kensington

(1936), a peaceful and orderly assembly to protest against the conduct of Mosley and his supporters, while their colleagues were condoning Blackshirt violence against questioners at a nearby mass meeting in the Albert Hall.

Among extant statutes which relate to seditious intention some date from nearly six hundred years ago. Others are a by-product of the panic (p. 293) provoked by the French Revolution, when the government invoked seditious intention to cover any sort of agitation for overdue parliamentary reforms. A young Edinburgh advocate, Thomas Muir, active in the movement, was sentenced in 1794 to transportation to Botany Bay for 14 years. Among the Gagging Acts passed at that time, the most drastic was the *Seditious Meetings Act of* 1817 An earlier statute of the same period was in part the basis of the charge against twelve Communists put on trial in 1925 for "conspiring since the 1st January to utter and publish seditious libels, and to incite persons to commit breaches of the *Incitement to Mutiny Act* of 1797." By then Sir Edward Carson, who had drilled the Ulster volunteers, was a Lord of Appeal and the Lord Chancellor was Birkenhead, who (as "Galloper" Smith) had conspired with Carson to incite armed insurrection against the attempt of a Liberal administration to implement Irish home rule in 1914. The Home Secretary, who instigated this trial, had himself assured the Ulster rebels that the God of Battles (ably seconded by the Unionist party) was behind them

An unrepealed act of the reign of Edward III places a particularly pernicious instrument in the hands of a repressive government, since it endows the bench with the power to commit to prison persons deemed likely to commit an act prejudicial to public order, within the elastic compass of a magistrate's interpretation of 'likelihood' on the one hand and 'order' on the other This statute was the basis of a notable trial shortly before the Tory administration of Baldwin mobilized all the resources of police protection to nurse a movement self-confessedly aligned with a foreign power whose actions proclaimed the imminence of its identification with the legal definition of the king's enemies abroad. On December 16, 1932, Tom Mann, a veteran trade-union leader, appeared before a London magistrate as: "A disturber of the peace and an inciter of persons to take part in mass demonstrations which are calculated to involve . . contraventions of the provisions of the Seditious Meetings Act 1817, and as such are subject to the provisions of the statute of 34 Edward III, cap 1."

The appropriate provision of the 1817 Act prohibits meetings of more than 50 persons anywhere within a mile of Westminster Hall, "for the purpose or on the pretext of considering or preparing any petition . to . . either House of Parliament for alteration of matters in Church or State." By itself, this piece of panic law-making could not have formed the basis of a charge, since a mass meeting called by Mann (among others) to urge Baldwin to receive a deputation of unemployed workmen was not due to take place until December 19th. Before then there would have been no case unless an unrepealed medieval statute had enjoined magistrates to take into custody and imprison troublesome persons not of "good fame to the intent that the people be not by such rioters or rebels troubled nor endamaged" Tom Mann and

Emrhys Llewellyn, charged with him, went to prison for two months The comment of a barrister is worthy of citation *

"The excessive anxiety to prevent the most distressed sections of the community from appearing before Ministers or Parliament and expressing their tragic situation in their own words was illustrated . . by Lord Baldwin on the debate in the House of Commons on the 11th November, 1936 He had refused either to receive the representatives of the unemployed hunger marchers himself or to allow them to be heard at the Bar of the House Mr Attlee had pointed out that the representatives of the great industries had never any difficulty in putting their views before the Cabinet and the government, and indeed that what the House of Commons was often asked to do in legislation was merely to give its approval to arrangements made outside the House with such interests Mr. Baldwin . made no attempt to answer the comparison drawn by Mr. Attlee but quite plainly suggested that, if the reception of deputations of marchers either directly by Ministers or at the Bar of the House was once permitted, the door would be open to civil war . He laid himself open to a devastating comparison, in a reply by Sir Stafford Cripps, between citizens who had to march and so could not safely be received and citizens who drove up in Rolls Royce cars and could be received at once"

The inter-war decades of Tory government witnessed the passage of several bills which recall the panic legislation of the Napoleonic period. After the repeal of the wartime *Defence of the Realm Act* (D O R.A.) the hostility of the trade-union movement to military intervention against the Soviet provoked the administration to carry through an *Emergency Powers Act* (1920) which gave the government the means of checking any large strike likely to interfere with "the supply and distribution of food, water, fuel or light or with the means of locomotion" The government was empowered to declare "a state of emergency," and then to issue regulations whose breach might be punished by imprisonment up to three months or a fine of £100. This Act was used at the time of the General Strike of 1926. More serious was the *Incitement to Disaffection Act* of 1934, which recalls some of the features of the *Incitement to Mutiny Act* of 1797. It did two things It made difficult any criticism of the armed forces, and it greatly circumscribed liberty of expression on cognate issues Any document opposing war or promoting pacifism, even if devised primarily for civilian consumption alone, might be construed as likely "to seduce members of His Majesty's Forces from their duty or allegiance" "Thus Quakers, issuing a pamphlet innocently intended for their own community," says Mr Kidd, "might be prosecuted if it fell into the hands of any member of the forces, although it was never intended for distribution to them at all"; and police, who had gained entry to premises by a search warrant under the Act, could seize any document likely to be evidence of an offence quite unconnected with disaffection among troops. "The very existence of a book, pamphlet, newspaper or private letter which *might* seduce (but has not in fact seduced) a soldier," states Mr. Kidd, "is 'evidence' against the author, printer or publisher of that document"

Professor Dicey has remarked that "a striking feature, we might almost

* *Justice in England*, Gollancz.

say essential characteristic, of the English constitution," is the right to organize processions. The *Public Order Act* of 1936 set new limits to this freedom, ostensibly to check militant Fascism, though the administration which was responsible for its passage tolerated such excesses from Mosley's movement as a multitude of extant statutes would have sufficed to keep in check. The Act gave police wide powers to prohibit meetings and processions without regard to the end in view, and not only the suppression of Fascist violence. In fact, its first use occurred during the Harworth Colliery strike. Within a month there were more than half a dozen cases of strikers charged under the section of the Act referring to "insulting words and behaviour."

When the second world war was imminent the government claimed, as in the conflict of 1914–18, extensive extraordinary powers over the lives of its citizens by the *Emergency Powers (Defence) Act*, 1939. Under Regulation 18B the Secretary of State received full authority to detain at his own discretion any person suspected of sympathy with the enemy. The scope of this regulation was greatly extended at the height of the national crisis in May and June, 1940, when it was applied explicitly to any person who was or had been associated even indirectly with an organization subject to foreign influence or control *or* under the control of persons associated actively or in sympathy with Nazi forms of government. The alacrity with which Parliament relieved the Home Secretary of such powers when the national emergency was at an end is encouraging testimony to the vitality of our traditional libertarianism

The right to criticize the government or the political institutions of the Homeland is not the only freedom of expression essential to the democratic process. In medieval times the Church claimed to be final arbiter of what people thought or believed; and its authority was easy to enforce when the pulpit was the chief source of information accessible to the mass of people The invention of printing created a new situation, and the Roman Church was not slow to take steps with a view to complete control over publication by means of the *Index Librorum Prohibitorum*. Among some 4,000 books listed therein are such famous works as Gibbon's *Decline and Fall of the Roman Empire*, Montaigne's *Essays*, Hugo's *Notre-Dame de Paris* and *Les Miserables*. Within the last decade Catholic Ireland banned the periodical *Picture Post* for three months for publishing a summary of H. G Wells's *The Fate of Homo Sapiens*, containing a strong attack on Roman Catholics in Eire.

Though the Reformation weakened ecclesiastical control over the printed word in England, the prerogative courts came to exercise a stringent censorship of their own, but the authority of these courts was gradually circumscribed until their final abolition in the seventeenth century. The Press, however, was not freed from direct control till 1695. Thereafter books could be published without any prior censorship, and liberty of the Press thus became a bulwark of English liberty, thus defined by Lord Mansfield in 1784: "the liberty of the Press consists in printing without previous licence subject to the consequences of the law."

The sting of this definition is in the concluding clause. A book may be published but its author is subject to the law of libel, a term which includes, as does sedition, some restrictions propitious to orderly progress and others

inconsistent with it One such is implicit in the offence of *obscene libel*. In Elizabethan and Stuart times wide freedom of secular expression was permissible A judgment given in 1739 imposed new restrictions According to the argument put forward by the prosecution and endorsed by the bench as a basis of future law, obscene libel exists if a book is: (*a*) derogatory of religion—"that great basis of civil government and society"; (*b*) destructive of morality—"destroying the peace of the Government, for Government is no more than publick order, which is morality." Thus the law should protect religion from undue criticism. In the nineteenth century emphasis shifted to a more pragmatic level in harmony with the prevailing prudery of a dominant class which subscribed to the doctrines of self-help and the rewards of abstinence. Hitherto an offence in common law, obscenity now became a statutory one, as laid down in the *Obscene Publications Act* of 1857, designed to check the sale of allegedly pornographic books by giving to justices of the peace the authority to order their destruction. A decision of Lord Chief Justice Cockburn sharpened the legal definition of the offence.

> "The test of obscenity is this, whether the tendency of the matter charged as obscenity is to deprave and corrupt those whose minds are open to such immoral influences and into whose hands a publication of this sort may fall."

So defined, obscenity involves an entirely personal decision about a purely subjective reaction The objective characteristics of obscenity have never been defined by law. In short, it is something "that is not done"; something which conflicts with custom and social outlook, whether in works of entertainment value or of ostensibly scientific aim In 1898 George Bedborough, secretary of the Legitimation League, was indicted at the Old Bailey for selling Havelock Ellis's *Studies in the Psychology of Sex; Vol.* 1, *Sexual Inversion*—a book declared in the indictment as containing "divers wicked, lewd, impure, scandalous and obscene libels . To the manifest corruption of the morals and minds of the liege subjects" Bedborough was persuaded by the police to plead guilty and Ellis's book, now recognized as a work of considerable scholarship, was suppressed Its author was condemned as a common pornographer without the opportunity to say a word in his own defence. His publisher was ruined.

A more recent example of the vagaries of the law relating to obscenity is the prosecution of Jonathan Cape Ltd for the publication of Radclyffe Hall's novel, *The Well of Loneliness*. Prosecution was prompted by a violent attack by James Douglas in the *Sunday Express*, August 19, 1928 Taking his stand on the Campbell Act, the magistrate refused to admit expert evidence on the issues involved·

> "The test is whether it is likely to deprave or corrupt those into whose hands it is likely to fall How can the opinion of a number of people be evidence?"

When counsel for the defence tendered the names of many distinguished witnesses drawn from many walks of life, the magistrate replied "I reject them all." The case was carried to appeal In dismissing the case the Chairman of Quarter Session said:

"There were plenty of people who would be neither depraved nor corrupted by reading a book like this But it was to those whose minds were open to such immoral influences that he referred"

To some extent the law must always lag behind the general level of enlightenment in a free society, and to that extent there is a perennial need for voluntary organizations such as the National Council of Civil Liberties to act as watchdogs of free expression of individual beliefs Beyond a certain point, however, the accumulation of obsolete legislation is an avoidable danger, and one which we cannot afford to treat lightly To ensure freedom from want it is essential that government must encroach increasingly on what has been the domain of private enterprise, but this encroachment will fulfil its proper end if, and only if, the masses, henceforth the employees of government, retain the right to criticize their rulers. Contrariwise, the rise of Fascism has shown how a too easy tolerance of those who renounce the slow but sure way of reasonable persuasion and public enlightenment through education can accomplish the overthrow of the democratic process, so conceived. In short, the time is overripe for a statutory assertion, *both* of the inalienable rights *and* of the indispensable restrictions of free expression in a free society.

Meanwhile, we may make too much of the fact that lawyers are human and liable as such to share the prejudices of their fellows. The fact is that the intellectual training of lawyers is too preoccupied with obsolete habits of thought to fit them to discharge their proper function in the present age. A long overdue reform of legal education, now rooted in medieval studies divorced from a scientific attitude to the nature of trustworthy evidence, and of the credentials of juridical definitions which antedate contemporary knowledge of human behaviour and social institutions, would contribute no little to a less arbitrary interpretation of such legal safeguards as we enjoy.

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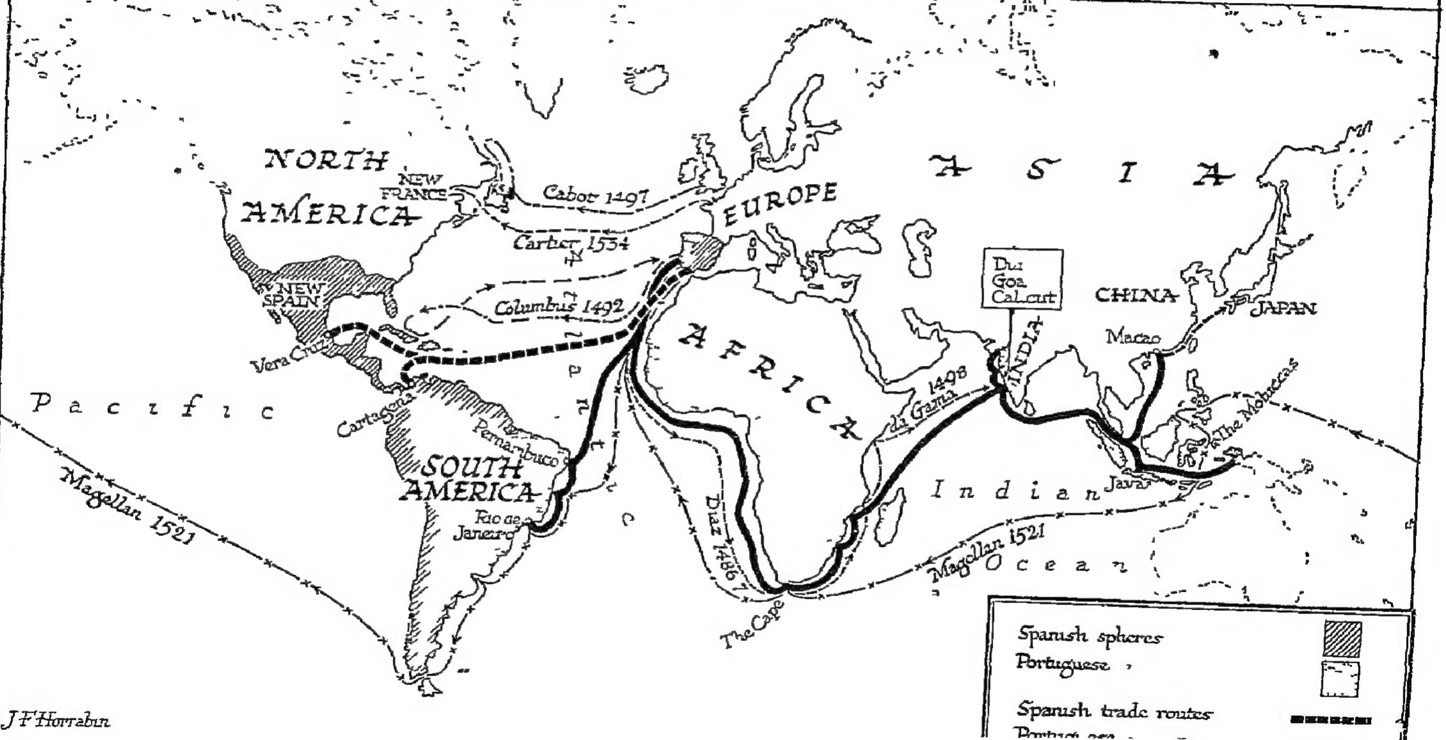
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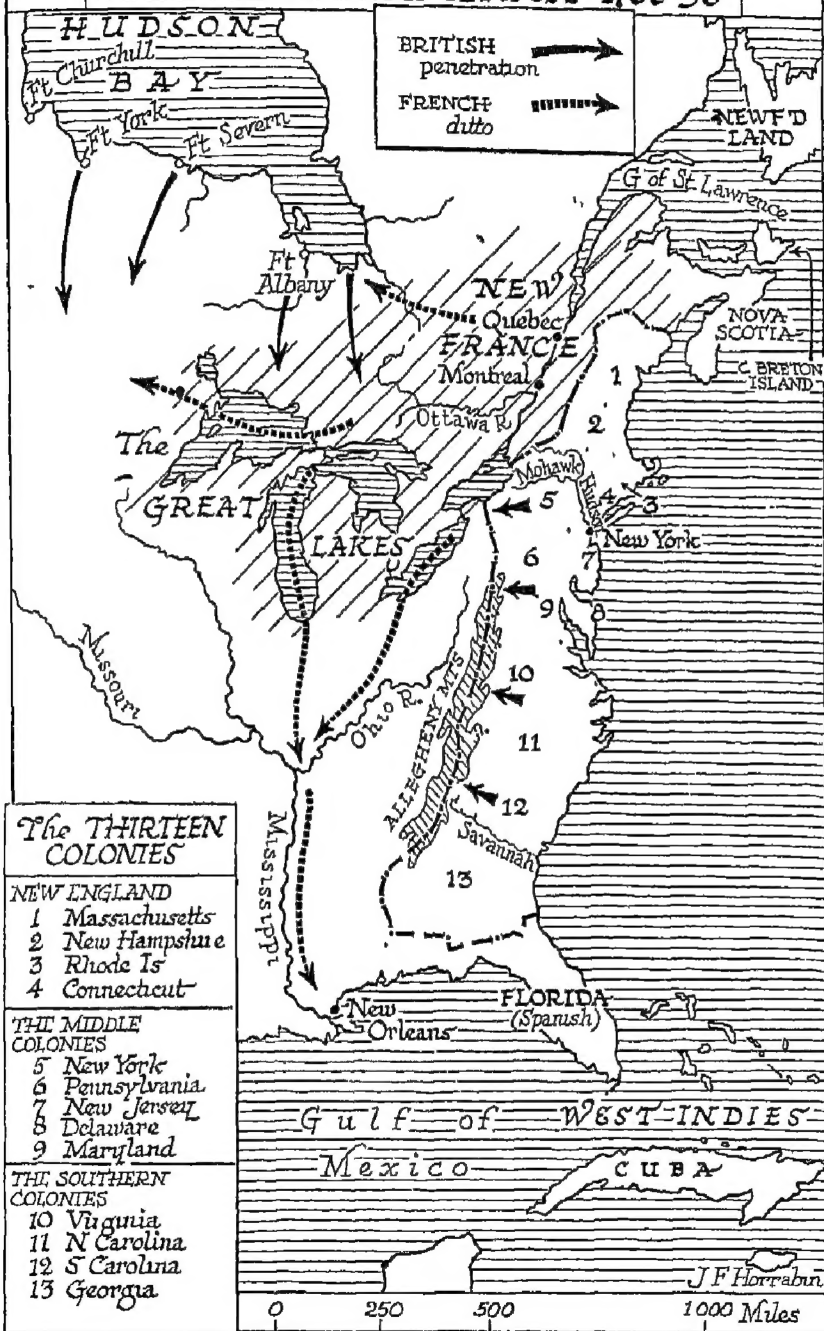
INDEX

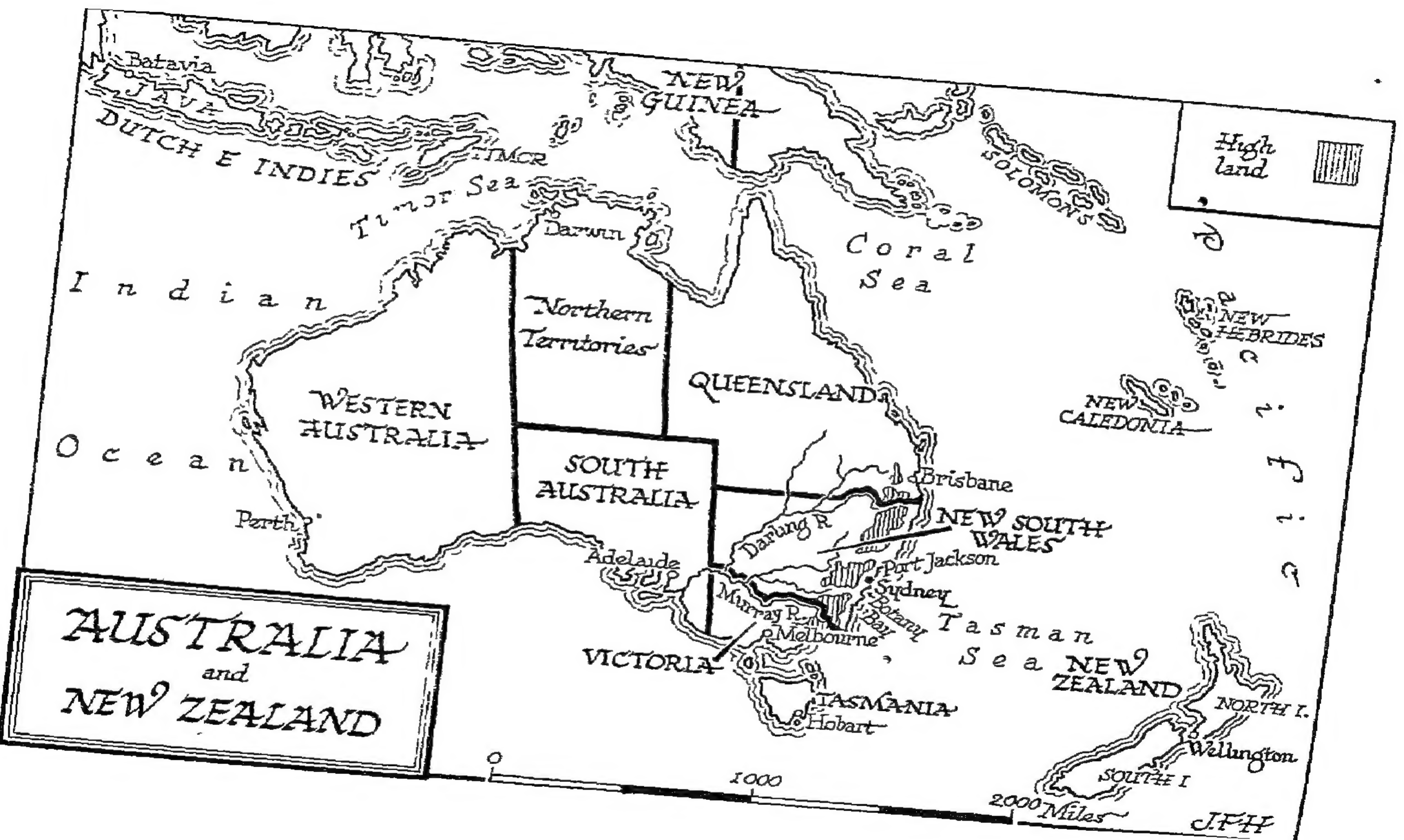


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BOMBAY: 15 GRAHAM ROAD, BALLARD ESTATE
WELLINGTON, N.Z.: 8 KINGS CRESCENT, LOWER HUTT
SYDNEY, N.S.W.: BRADBURY HOUSE, 55 YORK STREET



The NEW WORLD of the SIXTEENTH CENTURY
NORTH AMERICA
NEW FRANCE
NEW SPAIN
Vera Cruz
Cabot 1497
Cartier 1534
Columbus 1492
EUROPE
ASIA
AFRICA
Diu
Goa
Calicut
INDIA
CHINA
Macao
JAPAN
The Moluccas
Java
1498
da Gama
Diaz 1486
The Cape
Pacific
Cartagena
Pernambuco
SOUTH AMERICA
Rio de Janeiro
Magellan 1521
Indian Ocean
Magellan 1521
Spanish spheres
Portuguese "
Spanish trade routes
J F Horrabin


The CONFLICT of BRITAIN and FRANCE in N. AMERICA 1700-50
BRITISH penetration
FRENCH dutto
HUDSON BAY
Ft Churchill
Ft York
Ft Severn
Ft Albany
NEWF'D LAND
G of St Lawrence
NEW FRANCE
Quebec
Montreal
NOVA SCOTIA
C. BRETON ISLAND
Ottawa R.
The GREAT LAKES
Mohawk
Hudson
New York
Missouri
Ohio R.
ALLEGHENY MTS
Mississippi
Savannah
New Orleans
FLORIDA (Spanish)
Gulf of Mexico
WEST INDIES
CUBA
J F Horrabin
0
250
500
1000 Miles
The THIRTEEN COLONIES
NEW ENGLAND
1 Massachusetts
2 New Hampshire
3 Rhode Is
4 Connecticut
THE MIDDLE COLONIES
5 New York
6 Pennsylvania
7 New Jersey
8 Delaware
9 Maryland
THE SOUTHERN COLONIES
10 Virginia
11 N Carolina
12 S Carolina
13 Georgia


AUSTRALIA
and
NEW ZEALAND
High land
Batavia
JAVA
DUTCH E INDIES
TIMOR
Timor Sea
NEW GUINEA
SOLOMONS
Coral Sea
Pacific
NEW HEBRIDES
NEW CALEDONIA
Indian Ocean
Darwin
Northern Territories
QUEENSLAND
WESTERN AUSTRALIA
SOUTH AUSTRALIA
Perth
Adelaide
Brisbane
NEW SOUTH WALES
Darling R.
Port Jackson
Sydney
Botany Bay
Murray R.
Melbourne
VICTORIA
TASMANIA
Hobart
Tasman Sea
NEW ZEALAND
NORTH I.
Wellington
SOUTH I
0
1000
2000 Miles
JFH

SOUTH AFRICA
—1899—

Boer Republics


PORTUGUESE
N. RHODESIA
Zambesi
EAST
SOUTHN RHODESIA
PORTUGUESE
GERMAN S.W. AFRICA
Bulawayo
Bechuanaland
Protectorate
Limpopo
Walvis Bay
TRANSVAAL
Pretoria
RAND
Mafeking
Delagoa Bay
Johannesbg
SWAZILAND
Vaal R.
BECHUANA-LAND
ORANGE F.S.
ZULU LAND
Ladysmith
Kimberley
NATAL
BASUTO LD.
Orange R.
Durban
CAPE COLONY
East London
Cape Town
Port Elizabeth
J.F.H.
Railways
0 250 500 750 miles